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A JOURNAL OF CIVILIZATION

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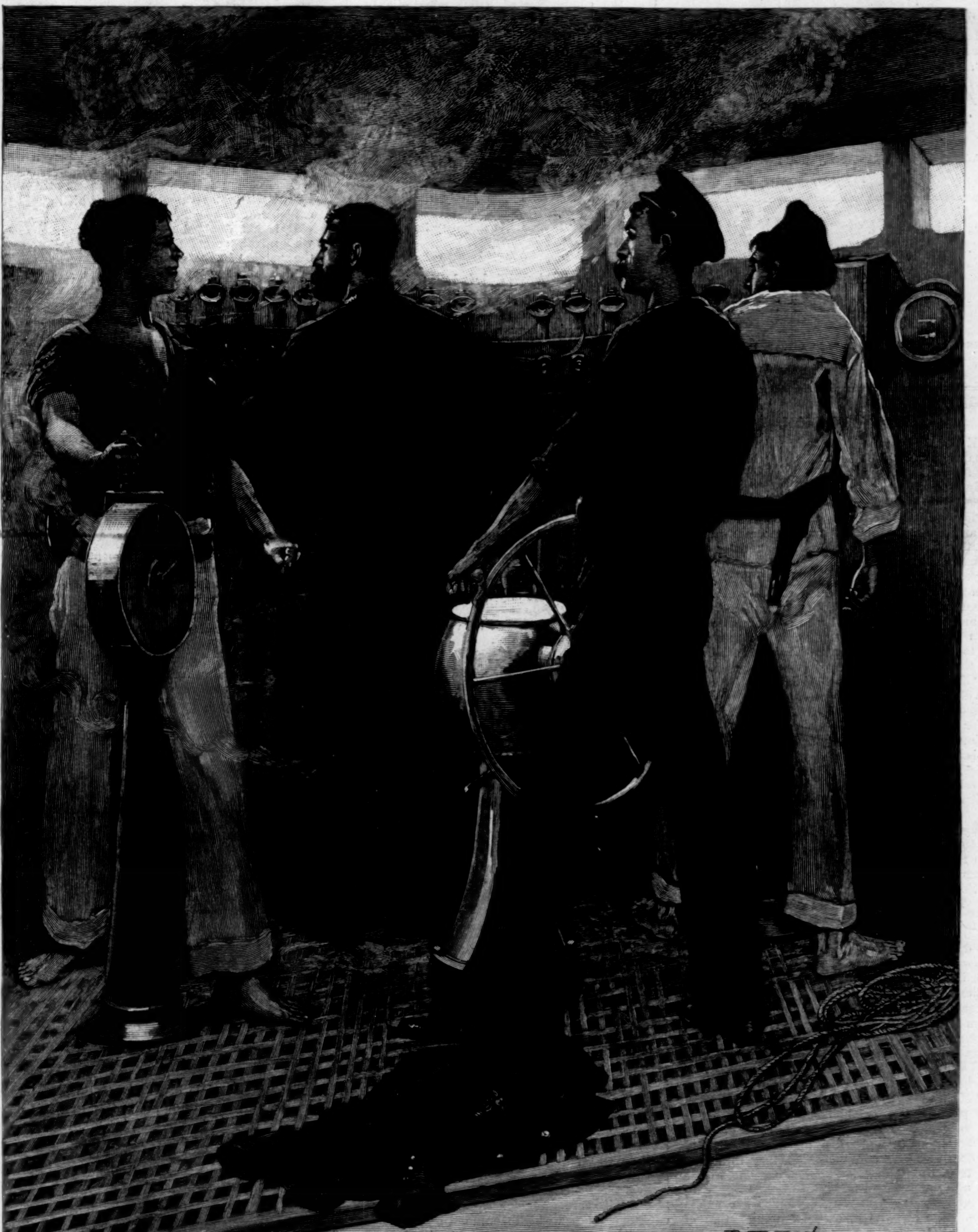

THE BRAINS OF THE SHIP—INSIDE THE CONNING-TOWER OF A MODERN WAR VESSEL IN ACTION.—Drawn by R. F. Zogbaum.—[See Page 866.]

"Bigger, Brighter, and Better than Before."

HARPER'S YOUNG PEOPLE.

An Illustrated Weekly for Boys and Girls.

Vol. XIII. began November 3, 1891.

HARPER'S YOUNG PEOPLE *having completed its twelfth year, signalizes its entry upon its "teens" with an "Anniversary Number," consisting of twenty-four pages contained in a cover with an appropriate design.*

TWO NEW SERIALS

are commenced in this number, namely, "Diego Pinzon, and the Fearful Voyage he took into the Unknown Ocean, A.D. *1492," by John Russell Coryell, and "Gracie's Godson," by E. H. House. There is also an illustrated article on the University of Pennsylvania, and a variety of other interesting matter.*

TWO RARE PORTRAITS.

To all those who on January 31, 1892, shall be subscribers to HARPER'S YOUNG PEOPLE, *or regular purchasers from week to week, two portraits, suitable for framing, will be presented—namely, Christopher Columbus and Amerigo Vespucci—the discoverer of America and the man from whom America derived its name.*

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HARPER'S WEEKLY,

(TWENTY-FOUR PAGES.)

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THE ELECTION.

THE political campaign which will end as this paper is issued has been almost as absorbing as that of a Presidential year. Its interest has centred largely in Ohio, Pennsylvania, New York, and Massachusetts. Wherever either party felt itself weak upon local issues, like the Republicans in Massachusetts and Pennsylvania and the Democrats in New York, they have sought to concentrate attention upon national questions, and to treat the State election of this year as a preliminary skirmish to next year's battle. In Ohio the nomination of Mr. MCKINLEY necessarily made his tariff bill the paramount question, and his personal activity in the campaign has been remarkable. The situation in no State has been more significant than in New York, because there the independent vote was divided in sympathy. The "line of cleavage" was very definite. Independent voters in whose opinion the question of the tariff supersedes every other consideration, and whose feeling for latter-day Republicanism is one of strong aversion and hostility, are practically Democrats. That is to say, they would always support the Democratic ticket unless the candidate seemed to them personally an unfit person.

Independents, however, who are deeply interested in other questions besides the tariff, and who, in considering the probabilities of good government, are not blind to the character and conditions of parties, do not so readily incline to a particular party. Their judgment of the real significance of the situation in New York was different from that of the former class. They held that the State ascendency of Tammany Hall was largely the question, and they did not agree with Mr. CLEVELAND that Tammany Hall is fairly described as "a certain political organization whose members support the principles and candidates of the Democratic party." On the contrary, they hold that Tammany has no principles whatever, and is a mere conspiracy for public plunder, and that to confirm and strengthen its power under the plea of promoting tariff reform is a very dangerous act, opposition to which is most untruly and unwisely described as a "frivolous and irrelevant pretext." In Massachusetts many independents who have supported Mr. CLEVELAND at two national elections, and would probably support him again were he nominated, voted for the Republican State candidates this year, because, without denying the excellence of Governor RUSSELL's administration, they think the interests of the State safer, upon the whole, in the hands of a party which is opposed by the liquor interest and by the enemies of unsectarian public schools. The assaults upon the administration of Governor RUSSELL merely served to show how little it was open to just censure. In Pennsylvania, where the frauds of Republican officers were the great issue, the force of the independent vote was thrown for honest Democratic candidates for the offices concerned.

Should the general result of the elections show that the Democratic success of last year is maintained or extended, it would go far to assure Democratic success next year with an acceptable candidate. The nomination of Mr. CLEVELAND would still depend undoubtedly upon New York. But although Tammany Hall is not his friend, and would know that whatever he may have felt to be the exigencies of this campaign, it could not make him its instrument, its action would be governed wholly by its view of its own interests, and it would undoubtedly yield to the general pressure of its party in favor of Mr. CLEVELAND or of any other candidate, unless it should see that it could secure a candidate of its own kind. Should the Democrats be defeated in New York, it would be due largely to the conviction that the growing power of Tammany ought to be restrained, and that the completion of ballot reform is hopeless under Tammany control. Tariff reformers who should interpret the result as a test of the strength of that cause would be greatly in error. It cannot be truly said that the campaign in New York has been conducted mainly upon the national issue, although that has been the Democratic endeavor, and many votes doubtless have been determined by that consideration. General Democratic success in all the State elections, however, could be fairly interpreted as favorable to tariff reform, as similar Republican success along the whole line would certainly indicate a protection sentiment. But a general Democratic victory might justly awaken anxiety among intelligent Democrats as to the effect upon the overwhelming Democratic majority in the House of Representatives.

RAPID TRANSIT IN NEW YORK.

THE stress of the election campaign has prevented the general attention to the report of the Rapid Transit Commissioners which its importance deserves. It is a concise and clear statement of reasons and conclusions; but, of course, it treats a subject upon which there must be great differences of opinion. The question was plainly intrusted to very competent gentlemen, and they have discharged their duty with care, intelligence, and discretion. They invited suggestions upon the whole subject, made personal investigations, and collected pertinent statistics of all kinds. It was early seen that any permanent and adequate system must be very costly, and that to give necessary relief the route must follow the main arteries of travel, and it was plain that Broadway was the central line of traffic. So much being clear, two questions remained—the general plan, and the motive power. After due consideration of cost and the availability of elevated roads and viaducts, it was decided that the work in the lower part of the city must be an underground structure.

The character of the ground was then accurately tested, and it was found that under that part of Broadway which would offer the greatest difficulties the tunnel must be bored through sand. Upon comparing the views of eminent engineers and specialists, it was decided that the excavation should be as near the surface as practicable, and that the scheme of one level was, upon the whole, preferable to the "double-deck plan." So it was determined that the work should be a single broad tunnel from the foot of Whitehall Street, with diverging lines under Whitehall and State streets and Battery Park to a point just above the Bowling Green, and thence under Broadway and Union Square to Fifty-ninth Street, and thence under various streets and upon viaducts to the city limits. The motive power, it was recommended, should be electricity, or some other power not requiring combustion; and the uniform speed for long distances should be not less than forty miles an hour, exclusive of stops. The report enters into certain details of construction, but this is the general scheme.

The two chief inquiries will be naturally in regard to safety and ventilation, and there is always the financial question. Will capital lend itself to the enterprise? The commissioners have evidently had this vital consideration constantly in mind. There is no doubt that increased facilities of city transit are a positive necessity. It is equally beyond doubt that tunnel travelling is exceedingly disagreeable. Man delights in sunlight and fresh air. The reports in regard to the London tunnel roads upon these points are not agreeable. The air is not pleasant, and the light, although adequate, is not daylight. There are also inevitable doubt and apprehension in regard to accidents in a tunnel. To this it may be well answered that there were the same when the elevated roads were opened. But their freedom from serious accident during all the years of their incessant service is remarkable. No scheme of city transit could be proposed which would not be a compromise, or which would not be open to objection. It is very questionable whether, upon the whole, the commission, to which the community is deeply indebted for the intelligent care with which it has discharged its duty, has not proposed as feasible a plan as is likely to be submitted. The report has been accepted unanimously by the Board of Aldermen, and when it is approved by the Mayor, the interest of capital in the undertaking will be tested.

THE VALPARAISO INCIDENT.

THE late incident at Valparaiso was serious, but it ought to be peacefully adjusted, without threats of any kind upon our part. Mr. EGAN, our Minister, and Captain SCHLEY, of the *Baltimore*, report that CHARLES RIGGAN, one of the *Baltimore's* petty officers, was brutally assaulted by several Chilians while he was riding on a street car. RIGGAN resisted, but was dragged from the car and murdered by a pistol shot in the arms of his companions. TURNBULL, an engineer or fireman, was wounded, and subsequently died. Thirty-five of the *Baltimore's* crew were arrested with unnecessary violence, and detained without due cause. The surgeons of the *Baltimore* were of opinion that some of the wounds upon the unarmed sailors were inflicted by bayonets, which are the arms of the police. Under instructions from our government, Mr. EGAN has demanded of the Chilian authorities reparation for the insults and injuries, and the ships *Boston* and *Yorktown* are on their way to Chili. Here is matter for serious misunderstanding, and consequently for friendly negotiation. It is therefore very unfortunate that a person who is so extremely *ingrata* to the Chilian government as Mr. EGAN should be still our representative. That he has not been recalled is a fact which ought to be explained.

It is not doubted that his name was associated with nitrate speculations, that he was confident of the success of BALMACEDA, and that he was regarded by the Chilian Congressional party as inimical to them. It is impossible that his course should not have alienated from his country the sympathy of the Congressional Chilians, who probably regarded the United States as hostile to their cause. The outbreak in Valparaiso is due undoubtedly to that belief, for it is not stated that the sailors were intoxicated or "on a spree." They wore the uniform of a country that had not sympathized with Chili, but, in popular opinion, had aided the enemy, and that was enough to provoke the attack. If this be a correct view of the incident, it shows the reason and the strength of the popular feeling, and emphasizes the necessity of explaining the continued presence of Mr. EGAN as our Minister in Chili.

Some similarity has been found between this incident in Valparaiso and the massacre of Italians in New Orleans. But the division of Chili into departments or provinces is not comparable to our union of States. The national government controls the police, and, as we understand, is responsible for order, and our request for an explanation would be made properly to the provisional government of the country. Assuming the facts to be reported accurately, our government properly asks an explanation. The reply of the Chilian government is that of irritation, which, under the circumstances, is not surprising. We ought to reflect that so far as the Chilians have been able to understand our conduct during their mortal struggle, it has not been friendly, nor, so far as is known, have we endeavored in the most obvious manner to remove misunderstanding. This is not an excuse for assaulting and murdering American sailors, but it helps to explain the feeling which incited the attack.

THE LOST LIBRARY.

THE decision in the TILDEN will case is practically a calamity for the city of New York. One of the most beneficent of bequests, the establishment of a great and complete free library, is baffled. The intention of the testator was as noble as it is indisputable. So fixed was his purpose that we believe the will provided that any legatee who contested it should receive nothing from the estate. Such a provision showed at least the earnestness of Mr. TILDEN's purpose, and it is painful to reflect that a public purpose so deeply cherished by a man without family should be defeated, and the worthy monument which unselfishly he designed should remain unbuilt. There is no question of Mr. TILDEN's wish in the disposal of his fortune. It must be with curious feelings that the fruit of the frustration of such a wish is enjoyed.

The just principle of interpretation of a bequest like Mr. TILDEN's is unquestionably that laid down by Mr. JAMES C. CARTER in his argument for the validity of the will. It is to "find out what his intention was." Of course, however, this must be discovered in the will itself, and it must be legally expressed. The legal ground upon which the decision seems chiefly to rest is the indefiniteness of the trust, which would not secure holding the trustees to a strict account for their discharge of duty. Yet in deciding such a point a court might well consider whether a purely technical application of such a rule might not work injustice. It is no doubt true that upon the forms of law our lives, liberty, and property

depend, but it is no less true that laws should be interpreted with due regard to justice and equity. If in this case the opinion of the courts had been practically unanimous, it might be admitted that the legal defects of the will were such that, in the general interests of society, although unfortunately in this instance, the will should be broken. But as the judges were equally divided in the lower court, and there were but four to three in favor of the final decision, the public feeling of disappointment and loss is not assuaged by the conviction that unquestionably it is a decision to be accepted without demur.

Among the distinguished acts of benevolence and liberality in the city, this design of Mr. TILDEN'S was very eminent. The library would have been of the widest and freest use and benefit, and it would have become, with munificent resources and under wise direction, one of the great libraries of the world. Had the devotion of the fortune to this specific purpose wronged a family, there would have been some feeling of alloy in the contemplation of its vast service. But such is not the situation. It is an immense loss to the higher education and nobler life of this community, which is but partially mitigated by the fact that the design of Mr. TILDEN will be in some degree fulfilled by an arrangement made with one of the heirs at law, by which it is supposed some two millions of dollars may be expended for the establishment of a library.

LOOKING TOWARD NEXT YEAR.

MR. BLAINE has returned to Washington, and it is announced that he is in better health than for a long time. This is so generally the report in newspapers of all political sympathies that it may be assumed as a correct statement. It revives naturally the speculations in regard to his nomination for the Presidency next year, and nothing has occurred to change the presumption that if he desires the nomination he will receive it. At all the Republican conventions and meetings of the autumn not only has it been remarked that no name was greeted with such enthusiasm as his, but that whenever a cheer was proposed for President HARRISON, it was followed immediately with a call for cheers for JAMES G. BLAINE, as if it must not be supposed that a hurrah for HARRISON meant preference for him over BLAINE. Indeed, the President has no personal following in comparison with that of the Secretary of State, and some Republicans who were most unwilling supporters of Mr. BLAINE in 1884 now extol his services as ardently as the most devoted supporters of that time.

It has seemed as if the condition of Mr. BLAINE'S health was such that he and his immediate friends would think his entering upon the great mental and physical strain of a campaign to be very unwise. But apart from the usual ambition of every conspicuous public man to reach the Presidency, there is one reason which we have heretofore mentioned that makes his acceptance of the nomination not improbable should the state of his health permit. Mr. BLAINE was the candidate whose nomination threw the Republican party from power, not on grounds of public policy, but for personal reasons. There was, indeed, a growing distrust of the party. Senator HOAR'S powerful description of the general situation of the country after many years of unbroken Republican rule as one in which foreigners held the one thing in which we surpassed other countries to be corruption, expressed a conviction which was forced unwillingly upon many Republicans. But they would not then have broken away, probably, had the nomination fallen upon Mr. EDMUNDS or Senator SHERMAN or President ARTHUR. The issue was personal.

The campaign was prosecuted mainly upon personal grounds. The great services of the Republican party in the past, its representation of a great moral movement, its original hold upon the conscience and intelligence of the country—all these were not denied. The refusal to support it had a personal reason of an importance not to be denied. Upon this presentation of the case, not upon a tariff issue, Mr. BLAINE was defeated. It was, in effect, not the defeat of a policy, or even of a party, but of a man. Nobody, probably, saw this more clearly than the one most interested. Nobody could measure more accurately the force of such a fact and its effect in history. The reversal of the verdict would not be so much the gratification of ambition as a personal vindication. The disposition to ask a judgment upon appeal, if circumstances should favor, might well be irresistible.

PROGRESSIVE REFORM.

THE civil service law, as it is called, was approved on the 16th of January, 1883, and the Reform League has issued a circular letter reviewing its effects during the eight years of its operation. It is a very interesting and valuable document, and its statement that there are more than a hundred thousand persons employed in the civil service, with salaries amounting to more than a hundred million of dollars yearly, shows in that fact alone the necessity and wisdom of reform, as under the spoils system that sum is held up at every general election as a prize to inflame the zeal of party, and prevent the election from indicating the will of the people in regard to policies of administration.

The classified civil service now embraces, according to the circular, more than 30,000 government employés, and their salaries are estimated at more than $40,000,000. These are both moderate estimates. During the last year about 700 places in the Indian service and more than 4000 in the Navy Department have been added to the classified service, and it is hoped that the President will largely increase the number by including post-offices and custom-houses which are now excluded.

Such facts and figures show the steady progress and extension of the reform, while it is constantly described as practically abandoned and dead. Very soon it will have rescued half of the enormous bribery fund composed of the salaries of offices which are not in the least political. The more it is tried, the more the reformed system commands public approval and confidence, and this publication will be found an exceedingly convenient manual of information.

FAIR JOURNALISM.

DURING the late campaign there was one instance of fair journalism which is worthy of commemoration. The *World* was strongly opposed to Mr. FASSETT, and its editorial columns were full every day of articles and paragraphs to defeat his election. But its report of the great Republican meeting at Madison Square Garden was as full and fair as that of the Tammany meeting on the following evening. The chief speeches were reported accurately, and the description of the spirit and incidents of the meeting was accurate and just. This is honest journalism, because it is a truthful statement of facts. The first rule of a good newspaper is to give the news truly, and not to distort it into untruth. The paper may comment upon the news according to its views or convictions. But to "cook the news" to serve a party purpose is a very debased and debasing style of journalism.

A GOOD WORK.

THE New York Eye and Ear Infirmary, the oldest institution of its kind in the country, whose work in behalf of the poor is exceeded by but one similar foundation in the world, is about to take a step that will still further enhance its usefulness, not only to this city, but to the country at large. Hitherto the graduates of our medical colleges who desired to perfect themselves as oculists, aurists, or laryngologists have been obliged to pursue their special studies in Europe. This is the more remarkable because our operative surgeons are counted among the best in the world.

The infirmary proposes to save the American student this necessity. Recently a commodious wing has been added to the old building at the corner of Second Avenue and Thirteenth Street, at a cost of more than $100,000. In this wing a complete laboratory has been established, with abundant room and opportunity for clinical studies. The hospital of the infirmary has been increased, and now the surgeons of the institution, numbering more than fifty in the various departments of eye and ear and throat, propose to open a regular school of instruction, in which every branch pertaining to their specialties shall be taught as thoroughly, with all the resources of modern knowledge, as in the famous schools of Berlin, Vienna, or Paris.

In an undertaking of this character the entire community has a vital interest which needs no elucidation. There is no question of the value or desirability of this work, and therefore the infirmary, which has a fair endowment, but not enough for the proper prosecution of the scheme, does not hesitate, not only on behalf of the suffering poor, but in the interest of American science and of humanity, to ask the generous aid of the community. Mr. JOHN L. RIKER, 34 Cedar Street, New York, is the treasurer of the institution.

"THE SUBSTITUTION EVIL."

AT the late meeting of the National Editorial Association at St. Paul a great deal of attention was devoted to what is called the "substitution evil," which is probably a phrase without meaning to most of our readers. Yet it is one in which they are interested. A great deal of money is spent in advertising by inventors and designers of every kind as well as by dealers in all kinds of articles, dry-goods, foods, books, medicines. The advertising extends widely the knowledge of such articles and of their superiority. But this very fact opens a chance for clever knavery.

The reader of the WEEKLY, for instance, finds in its columns an advertisement of the kind and quality of article that he greatly desires. But he will not be sure of getting it unless he takes reasonable care. For, upon hastening to obtain it, the dealer to whom he applies will assure him either that he has it, and—such is the craft of human nature—will then show him a good imitation, or he will assure him, with persuasive blandishment, that he has something which is just as good, and in fact a great deal better.

This is the substitution evil. Now the advertiser is entitled to an honest return for his investment, and he can obtain it and the customer can get what he desires only by exercising due care, and refusing to accept in place of what he wishes and has seen advertised something else which is called equally good. To make sure of this, let him follow strictly the directions of the advertisement, and when he buys, he will know that he is buying what he means to buy, and not a "substitute."

AN OMISSION IN THE GREAT FAIR.

ACCORDING to the special bulletin of the Census Bureau, the total school enrolment for the United States on July 1, 1891, was very nearly 14,220,000. This number is divided generally as, among private and parochial schools, nearly 1,500,000, half to each; about 65,000 in universities and training-schools and similar institutions; and to the public schools, nearly 12,730,000. Eleven churches maintain parochial schools, in which the Catholics have more than twice as many pupils as all the others, and the Lutherans about one-fifth. In view of this vital and immense public interest there is thus far a very serious omission in the contemplated arrangements for the Columbian Fair at Chicago, which, we trust, will receive the early attention of the Commissioners. They have wisely provided for buildings to be devoted to the interests of forestry, agriculture, horticulture, electricity, transportation, and other important activities, and Mr. THEODORE ROOSEVELT urges a complete exhibition of the weapons of hunting and fishery from the beginning. But by a curious omission no building has been yet set apart for education, although in the Government Building the Bureau of Education will have an exhibition.

But in this exhibition the States will not be permitted to take part, and their only opportunity will be in the building to which everything will be allotted which does not fall naturally into some other special building. But as there is no American interest superior to education, and as education is distinctively a State and not a national care, there should be certainly an adequately spacious building for a satisfactory display of this fundamental American interest.

The intelligent curiosity aroused in the representation of the American school in the foreign exhibitions, and by the Swedish school and kindergarten in the Centennial Exhibition at Philadelphia, illustrates the hold of the subject upon the public mind. No point of the exhibition would more certainly attract careful attention than that which showed the comparative progress and methods of education. The opportunity to study side by side the educational systems of New York and Mississippi would be of the highest advantage. The Commissioners, we are sure, need only to be reminded of the State basis of the public-school system to make provision for a proper comparative educational display.

PERSONAL.

SIR EDWIN ARNOLD says that gloomy Fleet Street, in London, is the most poetical place of which he knows; and EUGENE FIELD has expressed a determination to write a lullaby to a steam trip-hammer. When the true poetical imagination begins to work, it finds it a very simple matter to discover a sermon in a stone or a book in a running brook.

—Mrs. JULIA WARD HOWE presided with great dignity and simplicity at the meeting in St. Paul of the Association for the Advancement of Women, and at the conclusion of one of the sessions she created much enthusiasm by reciting her famous "Battle Hymn of the Republic." Mrs. HOWE is now seventy-two years old, her hair is gray, her broad forehead wrinkled, and her face marked by the touch of time; but for all that her age rests lightly upon her. Her blue eyes are keen and bright, and her voice softly modulated.

—The old mill at Ashland, Virginia, to which HENRY CLAY used to ride with a bag of his father's corn for the miller to grind, still stands near the CLAY homestead; and gushing from a bluff near by is the spring of cold water from which the great Kentuckian used to drink in his boyhood. It was to this spring that CLAY first directed his footsteps when, grown famous, he made a journey from Kentucky to his birthplace.

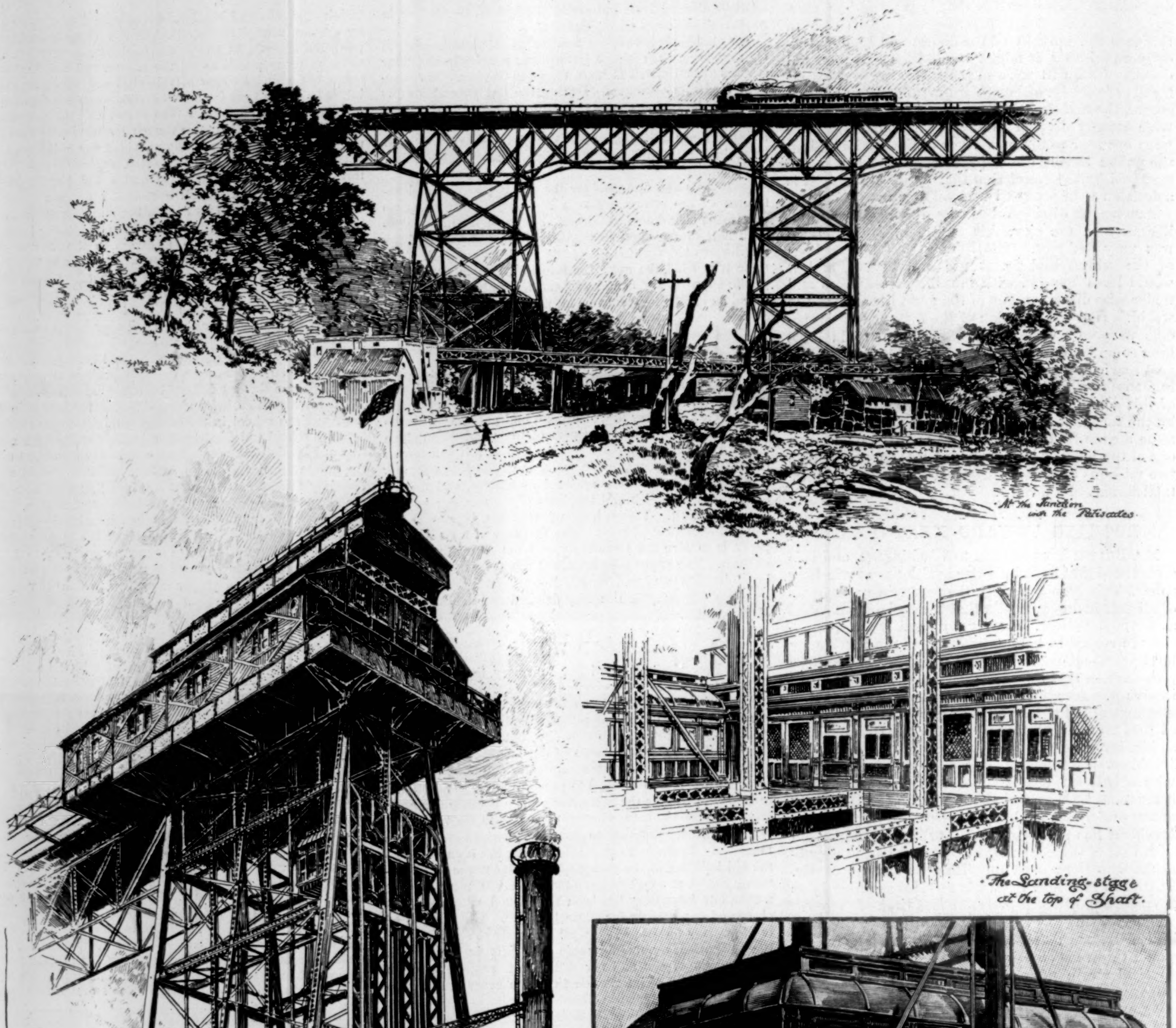
—W. S. GILBERT'S first play, the *Dulcamara*, brought him only £30. When the young dramatist had signed the contract and received his check from the manager, the latter turned to him and said: "Take my advice as an old stager, and never sell as good a piece as this for £30 again." "I took his advice, and never have," says Mr. GILBERT. The famous playwright lives on a farm within easy reach of London, and when he leaves it, it is to take a yachting cruise on the Solent. He is a man of fifty-four, fastidious in his dress, and inclined, now that success has made him rich, to take life easily.

—In elaborating the idea that she is under the direct guidance and influence of the spirit of MARY Queen of Scots, Lady CAITHNESS, new high priestess of theosophy, has had the oratory of her handsome home in Paris transformed into a sanctuary for the Queen. A portrait of the unfortunate MARY, depicting her in all the splendor of her fatal beauty, stands in the canopied niche where the altar used to be, and a hidden lamp sheds a dim light around it. It is here that Lady CAITHNESS repairs, in her moments of astral inspiration, to evoke the spirit of the departed Queen.

—The achievement of T. P. O'CONNOR in producing within one week a comprehensive and well-written life of PARNELL is a noteworthy but by no means unexampled instance of fast literary work. GOLDSMITH wrote his classic *Vicar of Wakefield* under even greater pressure, for an officer of the law stood at his elbow to expedite matters. MARION CRAWFORD'S *Mr. Isaacs* was the result of a month's work; and other authors, when the frenzy was on, have exhibited remarkable bursts of speed in composition. HORACE GREELEY, for example, wrote his "Printer" within thirty minutes. It was composed to be read at a Press Club benefit, and Mr. GREELEY rose from bed at midnight to write it, after the poet chosen for the occasion had shown himself unequal to the task.

—The Committee of the International Exhibition of Fine Arts at Berlin in 1891 has awarded to the Society of American Wood-Engravers, of New York city, the great diploma of honor. The book receiving this honor is that on *American Wood-Engraving*, published by HARPER & BROTHERS. The text is by WILLIAM M. LAFFAN, of New York city.

—THEODORE ROOSEVELT, the civil service champion, wants to have an "American Sportsman's Exhibit" made at the Exposition. In explanation of his idea he says: "I want an exhibit of every weapon and utensil used in hunting, fishing, and trapping since the discovery of the country down to the present day. We have the greatest hunting country on earth. The Boone and Crockett Club, of which I am a member, is enthusiastic over an exhibition of the kind, and we want nothing in it but what is American. For instance, I know where the rifles used by DAVY CROCKETT and DANIEL BOONE can be secured.



THE WEEHAWKEN, NEW JERSEY, ELEVATORS, THE LARGEST IN THE WORLD.—DRAWN BY HUGHSON HAWLEY.—[SEE PAGE 866.]

THE DEAD THAT DID NOT DIE.

BY J. C. B. ANDREWS.

WHEN a French army officer grows old and is retired, he does one of two things. He either cultivates a small garden near Paris and is devoted to his flowers, or he turns *boulevardier*, and exhibits himself in the streets with a swagger that plainly says: "Behold me! I am a soldier of the empire, or of the republic," as the case may be.

Colonel Beltec was no exception to the rule. *He* was the *boulevardier* to the tips of his lavender kid gloves and the curve of the inevitable japonica, worn on the right side, because of the ribbon of the Legion which was tied in the upper button hole of the left lapel.

His coats were very broad at the shoulders and full over the chest. They shrank in at the waist and sorely pinched that portion of his anatomy, which was fast losing its slender lines under the continued assaults of old age, now coming on with giant strides. The cut of these particular garments was always the same—*en froc*—and they had short flaring skirts like those on the surtouts of the *zous-zous*. The color was always blue, the material invariably West Riding broadcloth. The waistcoats affected by Colonel Beltec were so marvellously gotten up in all respects that it is not possible to give even a meagre description of them within the confines of this tale, so let them pass. The trousers were always light in color, of the finest kersey or light-weight Melton, and were very tight at the ankle, large at the knee, and voluptuously full at the hips. On his feet were always white gaiter-tops; on his head was a very straight-brimmed, tall, and well-brushed silk hat, with a great bell crown.

Take the colonel thus arrayed, with the addition of lilac or lavender silk for a neck-cloth and a light rattan walking-switch, and you can see how he would fill your eye should you meet him humming a love-ditty along the Bois or at the Fountain. He liked to believe—and he was so earnest in the desire that he came to look on it as fact—that his military air and cavalry walk made those who saw him turn and say, noddingly, "*Ah, c'est un brave; ce çà!*"

"And why not?" he would think. "Surely they must know that I am Beltec, late colonel of the 91st. Though this is Paris and that was Algiers, they must know that Beltec's 91st never lost a fight. Ah, they *were* soldiers, those outcast *képis*, and I—well, I was colonel of the bravest set of devils in all Algeria!" And then the back would curve and stiffen yet more, and a deep "huhun" come from the grizzled breast.

He had the beak of a Napoleonic eagle, and the same bird's fearless gray eye flashed beneath shaggy brows, thatched with descending crests of fierce and warlike hair. His heavy mustache and the chin tuft, known as an imperial, were dressed in verisimilitude to those of his former chieftain and dearly worshipped Emperor. His full iron-gray hair was brushed precisely as were the locks of Louis Napoleon. One thing he could not do, try as he would. He could never so command his eyes that they would take on the vacant, fishy look always found in the visual apparatus of "the man of Ham." This was a source of great grief to him, for he only desired to be the exact counterpart of his idol in all things. He even affected Louis's somewhat thickened tones and slight English accent.

Such, then, in the year 1888, was this Colonel Beltec.

Years before, young Ambroise Beltec had entered the army with small hope of speedy preferment, but a disposition to enter into any expedition that promised an epaulet. The result was a warm interest in the fortunes of Louis Napoleon that eventually led to promotion and a place near the body, when that plotter became President, and later, on Emperor.

Before he reached any great heights, however, he met and loved a certain Mademoiselle Justine d'Auxelles, whose papa and mamma were rabid royalists, and who determined that their daughter should never be the wife of the too eager captain. He laid his cause before the Prince-President, who at once aided him by giving the old Sieur d'Auxelles a place at the Élysée. This enabled the young people to meet and enjoy little interviews without the interference of third parties.

At one such time Beltec had pleaded his cause with such good effect that the mademoiselle was won completely. He made a manly and dignified declaration that ended with these words:

"Justine—mademoiselle—I hardly know what more to say. That you must know that I love you seems only probable. It is not possible that I have hidden from you all my affectionate hopes. The Prince-President is my firm friend, and that means much for me—as it may for you. I have adored you for a long time in silence, and yet you must have known. I realize the feelings of your father, and foresee objections to our marriage, yet why does the Sieur d'Auxelles serve Prince Napoleon if he be so great a lover of the Bourbons? Surely you will not let a political whim stand in the way of my whole life's happiness? Let us make no marriage of convenience, Justine; let it be the union of hearts! Will you not say 'yes,' and trust me to win consent from the Sieur d'Auxelles?"

Justine stood trembling and agitated, but finally looked up with happy eyes, and whispered softly, "I will"; after which she fled down the corridor to her father's apartments—first giving her mouth to be kissed, which filled her with a joyous trepidation she had never known before.

"What, sir! *You! You* marry my daughter? You marry a d'Auxelles?" And the old gentleman spluttered and breathed very hard at the young gentleman who had asked him for the hand of Mademoiselle d'Auxelles.

"Monsieur," proceeded Beltec, unmindful of the old man's wrath, "I have asked for your daughter's hand, and I am honored in the asking. I know she is a better woman than I deserve to have, but I love her, and she loves me, and—"

"What!" fairly howled the old gentleman. "You have spoken to her before you have said a word to her parents? You have done *this?* What are we coming to in France? Oh, for the days of the kings!" and the Sieur d'Auxelles appeared as if about to have a fit.

"The Sieur d'Auxelles forgets he utters treason against France with such words," said Beltec, with fine dignity. "Monsieur, I am not here to bandy words or indulge in platitudes for a past that can never be repeated in our country. I am a soldier, and a blunt one. The sole question is, have I your consent to wed your daughter?"

D'Auxelles looked at the captain a moment, and then replied: "Monsieur, you say well. We will not bandy words. Once and for all, you cannot marry my daughter. Once and for all, I will quit a place I never should have taken. An office in the gift of the Prince-President will be vacant before another day passes." Going to the door, he opened it, and bowed low to the man who passed out with ominously flashing eyes.

[*From Le Moniteur of June 17th.*]

The Sieur d'Auxelles, Secretary of Expenditure to the Prince-President, has resigned his office because of ill health, and will proceed to travel in hope of regaining it. Madame and Mademoiselle d'Auxelles will accompany him in his endeavor to find a restoration of his usual robustness.

* * * * * * * *

The Captain Ambroise Beltec has been appointed to succeed the Sieur d'Auxelles as Secretary of Expenditure to the Prince-President. The Captain Beltec is a man known, etc., etc., etc.

The *coup d'état* was an accomplished fact. For it and throughout its many phases one man had worked and

planned and watched, had schemed and aided and cajoled, had neither eaten nor slept until it was all over. It was the Captain Beltec. No man heard of him in the matter. He seemed but a little cog on one of the smaller wheels; but the Emperor knew better.

Two days after the *plébiscite* had been announced, and matters were following the new routine, Beltec went to Louis, and said:

"You know, sire, how I love you, and how great is my devotion to you and yours. I am come to ask a favor. You have told me that I should be Grand Comptroller of the Household. Sire, you know that my heart is dead, and I have no ambition to be at court. Give me leave, sire, to go to a regiment in foreign service, with no increased rank and with plenty of work, and there let me strive to forget my sorrow." His voice trembled, and he stood pressing his hands convulsively on a chair back.

The Emperor replied: "Beltec, wait until after my coronation, and you may go then, if your mind be unchanged. I don't want you to go. A man in my position and exalted station can have but few friends. Those he can ill afford to part from."

Beltec, visibly affected at this speech, could only bow and withdraw from the presence.

[*From the Journal Officiel de l'Armée.*]

GENERAL ORDER NO. 52.

The Captain Beltec, heretofore detached, is ordered to report to the colonel commanding 51st Regiment, Algiers. The Emperor takes this method of saying to the army that in every place held by Captain Beltec there has been exhibited a single-hearted devotion to our beloved France and the interests of the Emperor that is most worthy of emulation on the part of every man in the armies of our glorious country.

Once in Algiers, Beltec worked like the good soldier that he was, and won the respect and admiration of men and officers.

One evening, as he sat over a *petit verre*, reading the last newspapers that he had received, his eye fell on the following paragraphs in one of them:

Last Thursday, at Brussels, the Sieur d'Auxelles met with a very heavy loss in the death of his daughter, the Demoiselle d'Auxelles. The young lady was thrown by a vicious animal opposite the Hôtel Royal, and struck her temple on a stone of the drinking fountain. Mademoiselle d'Auxelles was a Maid of Honor to H.R.H. the Countess of Chambord, and was much loved by all the household.

The young lady was very beautiful and accomplished, and was betrothed to the Baron de Lemouille, Chamberlain to H.R.H. the Count of Chambord. The nuptials were to have occurred in the autumn.

Beltec laid the paper down, and then took it up again. He saw that it was *Le Journal Belge*, published in Limousin, and that the item appeared under the head of "Brussels News." His eyes closed slowly, and as the lids came down they crushed out two great tears that slid over the cheeks, and plashed noiselessly on the undress jacket that covered his breast.

"Well," he murmured, "nothing remains but to fight for death. I will get a chance to go in after those devils back here. Who knows but—"

He did not finish the sentence, but strode out of the *café*, and made for headquarters.

After years of fighting, after seeming centuries of time, Beltec came back to France—to Paris. Then it was he blossomed out into the *boulevardier*, and was as we have first seen him pictured.

He bought a little bit of land back of Montmartre. The neighborhood is not exclusive, so land is not expensive there; and a retired colonel is not a Crœsus. In this spot he pottered about and planted and dug and raised his roses, and, with the aid of his old woman housekeeper, led quite an ideal existence.

His one extravagance was a large white japonica every day; for "*she* loved white japonicas," he was wont to say to himself. The afternoon would see him take the 'bus for the town, and then promenade in the Bois. This life led him to indulge in day-dreaming, and it was thus that he began to believe that people who saw him always commented, "*Ah, c'est un brave; ce çà!*"

The Exposition saw him haunting the Algerian quarter, and day after day he would wander about and chat with those in charge, vastly pleased at the deference shown him as an old Algerian officer. But the Exposition closed, as such things will, and then he wandered over to the gardens around the old Tuileries, glad to sit there and muse; for his last view of his Emperor had been in these gardens.

One day he noticed a very fat and florid-faced woman on a bench near him, who was accompanied by a child of three or four years and the child's nurse. He was much interested in the mischievous behavior of the young one, and after finding them in the same spot day after day, he once ventured to say to the stout woman,

"Madame, this is your grandson, I presume?"

"Not grandson, monsieur, but granddaughter. The only child of my only son."

He bowed, and said: "Alas! I am childless, but I love children. May I be seated, madame? Thank you! What is the little one's name?"

"Justine, monsieur; Justine d'Auxelles Bernard. You are ill?" inquired the fat woman.

"Nothing. It is really nothing, madame. I am an old soldier; a wound hurt me. Believe me it is nothing. You have spoken a name I have not heard in thirty years. Did *you* know Justine—Justine d'Auxelles?"

"Justine d'Auxelles?" went on the fat woman. "Why, *I* am, or was, Justine d'Auxelles."

Colonel Beltec murmured: "I had a cousin who once knew her, and was ever talking of her. He told me she died in Brussels years ago."

"Ah! Well, he was mistaken. My sainted father was afraid I would marry a scamp of a fellow"—the colonel winced—"who went out to Algeria, so he had a something put in a paper in some little town in Belgium, and had some copies sent to Algeria. I assure you I am alive."

Colonel Beltec smiled—Heaven, such a sickly smile!—and said, "So I see, madame." Then he hastily added: "Well, I must go. May I kiss the little Justine? Yes? Here, little one, come to an old man for a salute. *Au revoir*, madame;" and lifting his marvellous hat, he bowed and left.

That night at dinner old Cécile heard him murmur, with a sad tone in his voice:

"She was wrong. Justine, my little Justine, is dead; died long years ago, and is buried." Then a pause. Then: "They are sad.... these thoughts! Heaven.... how fat that woman is!"

GETTING ON TOP OF THE PALISADES.

BY JNO. GILMER SPEED.

THE largest elevators for carrying passengers in the world have just been completed on the banks of the Hudson, near Weehawken. The high table-land in New Jersey, opposite New York city, and between the Hudson River and the Hackensack, has up to this time not been used as generally for purposes of pleasure and residence as it should have been. This elevated plain, known as the Palisades, is at its beginning some one hundred and fifty feet above high tide, and is over a mile wide at the same point. It stretches north for many miles up the Hudson River, and naturally rises in elevation as it proceeds. This high land has been accessible only by steep grades for wagon roads, and by means of stairways which climbed laboriously up the steep cliff. The Hudson County Railway Company, which operates the elevated road at Hoboken and controls many of the street-car lines in that neighborhood, has of late years been extending these lines, and increasing the facilities for getting on top of the Palisades, and from one part of this high plateau to another. The most recent addition to the plant of this company has been the building of huge elevators at Weehawken, where the ferry-boats from Forty-second Street and Jay Street, New York city, discharge their passengers, and where also the West Shore Railway starts north and west to Albany and Buffalo. These elevators are the largest ever constructed for passengers, and in planning them the engineers have adopted new devices to secure their safety against accidents. From the elevators, which rise just from the water's edge, there is an immense viaduct or elevated railroad which runs some eight hundred feet back to the hill, where connections will be made with the various steam and horse cars which will run in one direction and another.

In crossing the Hudson River from New York the stilt-like structure for the elevators and railroad cars looks frail and delicate, and suggests more a spider's web than a very stable and solid structure capable of carrying immense weights and moving loads, and still having a surplus strength very much beyond the weight which could ever be placed upon it. At a distance one cannot fail to have the feeling that the structure is too light and insecure to ever do any very heavy or continuous work. This feeling is very much the same that one experiences in looking from a distance at the high curve on the New York Ninth Avenue elevated road above the Central Park. Arrived at Weehawken, however, and standing under the structure, the veriest novice in bridge-building cannot fail to be impressed with the strength and solidity of these steel piers and trusses. They do not look light now, but seem entirely sufficient to do the Titan's work for which they were designed. What this work is may be gathered from the fact that in every hour six thousand persons can be taken each way, up and down the elevators, and to and fro across the viaduct, which is 153 feet above the water. Elevators have never before been asked to do such work as this.

The elevator tower has been made for three cars, each of which will hold one hundred and thirty-five persons. They run independent of each other, and all can be going either up or down at the same time, or variously, as desired. The doors are almost as wide as the cars, and the conductor with a simple device opens and closes both doors at once. On one side the passengers are discharged, and they enter from the other end; therefore, when there is a rush of travel, the cars will empty and fill at the same moment. The elevators are designed to have a speed of 400 feet a minute, but it is not proposed to run them faster than 200 feet a minute. At this rate each elevator will take up the 153 feet from the water's edge to the viaduct 135 persons in 45 seconds, and it is estimated that in 30 seconds more the passengers can be discharged and a new load taken on. For the ordinary traffic there would be no need for such quick work or so large a capacity as this, but within a short time places of amusement and a race-track have been started near Weehawken. To these places and from them great and impatient crowds come and leave at the same hour, and it is necessary to handle a whole boat or train load at once.

The power to run the elevators is hydraulic, the water being stored in compressed tanks under a pressure of 190 pounds per square inch by means of two compound condensing Worthington pumps of about 85-horse power each, taking steam from three internal furnace return tube boilers of about 100-horse power each. Only two of these boilers, however, will be used at once, and the third will be held in reserve. The same firm which built the lifts in the Eiffel Tower has designed and constructed these enormous elevators. F. E. Brown, Jun., of the Otis Company, designed the whole elevator plant, the engineer in charge in both instances being Mr. Joseph R. Furman, of the same company. Mr. Furman is a young man, not yet twenty-seven, and has justified the responsibility intrusted to him most admirably.

The most important feature in the construction of an elevator is the device for stopping it in case of an accident. In nearly all of the modern elevators these devices have been made to act automatically, so that nothing need depend upon the skill, courage, or presence of mind of the conductor. Were this not so, it would test the courage of any man to trust himself to the careless men in charge of the elevators in the large office buildings, the architects of which usually specify that the elevators shall have a speed of 700 feet per minute. It is true that none of them goes so fast as this, for the reason that it would be impossible for the conductors to stop accurately at the several floors to discharge or take on passengers. But it is pleasant to know that even though a conductor should lose his head, or the car break loose from its ropes, it would be stopped by the devices now in general use, and no one would be hurt. The testing of these devices is therefore most important, and the test applied by the builders to these huge cars which are to lift people to a level with the top of the Palisades was watched with interest by all concerned. The apparatus for testing consisted of a heavy timber trestle supporting the guide strips, between which a temporary cage loaded with 34,000 pounds of cast iron—equivalent to the weight of the cars and their load of people—was suspended on a trip lever, the support of which could be disengaged by pulling on a light line. The safety grips, which were the actual ones to be used in the permanent elevators, were placed under the cage, one on each side, in their proper position with relation to the guide strips. From each safety grip a light line, representing the governor ropes to be used on the elevators, was carried to and attached to the cross-head of the timber trestle.

At the signal the lanyard was pulled, and the cage with its load released. It dropped freely about two inches, when the safety engaged with the guide strips, and after a further slide of one and three-quarter inches came to rest without shock. Then another test was made with 2000 pounds more of iron added, and the result was substantially the same. Then came a third test, for the personal satisfaction of the engineers who had designed the safety device. With a load of 36,000 pounds they let the car fall ten inches before the safeties were applied, and on this occasion the car dropped only eighteen inches. This was eminently satisfactory to them, as had also been the other tests.

The guide strips are of yellow pine, six inches by eight inches, built up in three pieces of two and two-thirds by six inches, strongly spiked together, and are secured to the latticed channel iron posts of the elevator tower by three-quarter-inch bolts spaced about fourteen-inch centres; the heads of these bolts are countersunk in the faces of the guide strips, so as to leave a smooth guiding surface. The safety grips consist of forgings with a rectangular notch surrounding the guide strip, the edges of the notch being bevelled to form cutting edges. Below the main forging is bolted a plate with a similar notch, but having toothed edges, the whole swinging on a centre so placed that when the safety is in normal position the toothed and chisel edges are well clear of the guide strips, but when swung outward they engage and cut into the guide strip on its face and two sides. The test on the Eiffel Tower elevators loaded with 32,000 pounds was very gratifying to the French engineers. On the first elevator, when the ropes were cut, the car fell twelve feet. On the second car, when the safeties had been readjusted, and the same weight put on, the fall was only eight inches.

The largest elevator in use in New York city is that in the tower of the Produce Exchange. This will carry fifty persons. This was also the capacity of the cars in the Eiffel Tower. It will be seen, therefore, that each of these new elevators to the top of the Palisades has a capacity more than two and a half times greater than those which were popularly heretofore thought to be quite as large as lifts could be safely constructed. The Weehawken structure will be finished and thrown open about the middle of November. It will be interesting to see how easily large numbers of people can be taken up and down in this manner, for in the plans now under advisement for giving rapid transit to New York city by means of deep underground roads, the elevator for raising and lowering passengers is a very important feature of the scheme.

THE BRAINS OF THE SHIP.

BY RUFUS FAIRCHILD ZOGBAUM.

GONE are the days of the "dandy" sailing frigate, of the great three-deckers with line over line of frowning ports, tier on tier of black-mouthed cannon, the tall tapering masts and heavenward-soaring pile on pile of snow-white canvas; gone are the days of cutlass and boarding-pike, of the close fighting, hand to hand, yard-arm to yard-arm, gun muzzle to gun muzzle, of the rush of boarders from sinking hull to enemy's deck; gone are the days of glorious *Old Ironsides*, of the *Bonhomme Richard*, the *Victory*, and the saucy *Arethusa*. One modern cruiser could destroy a whole fleet of the old "wooden walls."

And what strange monsters are these that have replaced them! What grim shapes these iron floating fortresses of modern times, these things that glide almost noiselessly over the waves, pouring out volumes of black smoke from their great chimneys, churning a wake of streaky milky-white with the huge blades of their powerful propellers, and cleaving the dark waters with their sharp massive rams, moving with the speed almost of a railway train irresistibly onward against wind and tide, monsters of the sea such as the wildest fancy of mythology never imagined!

With the change in ships has come a change in the life of the crews that man them, that sail them, that fight them. Jack has much more to learn now than had his sturdy ancestors. The delicate and complicated machinery of the modern war ship, the improved ordnance, the deadly torpedoes, the frightful power of new explosives, and the use and manipulation of all these means of defence and offence, call for an amount of preparation and training on the part of officers and men the lack of which in time of war all the patriotism, courage, and wealth in the country could not make up for. It is for the study of the new conditions of naval warfare, and the familiarizing, particularly of our officers, with the novelties and improvements on the modern ships, that the Squadron of Evolution was formed, and under the wise, painstaking, and able management of its commander, Admiral Walker, excellent service is being rendered to the navy and to the country. The tremendous range and power of both great guns and the so-called "rapid-fire" ordnance would sweep the deck of any vessel of every living thing, and even the thick steel sides of a battle ship are none too strong to resist the hail of projectiles that would be hurled against them in a battle.

The responsibility of the ship's captain is greater now than ever. On his judgment and experience depend the safety of his craft and the lives of the crew, and one mistaken move on his part may cause the destruction of the vessel and give the victory to the enemy. His post is one of great danger; although protected by the heavy walls of the conning-tower, from whence he directs the course of the combat, it is exposed, from its very position forward on the deck, to the enemy's fire, and calm and determined indeed must be the courage of the man who in such a hell of fire and devastation can coolly watch the foe and communicate his commands to his subordinates at the guns or in the bowels of the ship. A touch of the button of one of the row of electric bells gives the order to fire gun or torpedo, or perform some manœuvre or evolution, ready hands at the annunciators telegraph his orders to the engine-room, while with word or gesture he directs the course of the ship, and the steam steering-wheel revolves to port or starboard in the hands of the well-trained quartermaster. In the wild storm of battle, here in the conning-tower the mind that governs all has its place; and for weal or woe, for life or death, for victory or defeat, the thought that flashes over the wires, even to the uttermost parts of the vessel, is born here where lie the brains of the ship.

THE FISHERMEN OF SEABRIGHT.

BY FLAVEL SCOTT MINES.

NEARLY all the blue-fish that find their way to the markets of New York are caught along the "banks" off the coast of New Jersey. Some are brought by fishing-schooners that go off for a cruise of a week or so and return laden with the catch, but it is safe to say that as many if not more fish come from the fishermen who live along the coast. The colony at Seabright is the largest of any, although a few fishermen are to be found at Galilee, Long Branch, and all along the shore. Seabright, being the most convenient to the city, naturally offers greater inducements to the men, and there are five to six hundred men and about three hundred boats at that point. The coast from Sandy Hook to Cape May is well known as a summer resort, and the owners of the cottages that line the shore, particularly at the eastern end, represent millions of dollars. In the midst of these fine houses and enormous hotels is found the little colony of men who make their living by fishing. Some years ago, when the place was even more the fashion, and the price of land—or, more properly speaking, sand—began to rise, a number of fishermen

organized and incorporated "The Seabright Fishing Association." Land, or sand, was purchased, and on this the fishermen and their families live, flanked on either side by a large summer hotel. About the middle of June a fire swept over this portion, and completely wiped out the settlement right down to the water's edge. Most of the men spent last summer in tents, a number of which are standing now, but the place re-echoes with the sound of hammers, and a number of neat cottages are rising on the ruins. But it is tedious rebuilding an entire village, and the population will be smaller than usual this winter, many of the families having gone down the coast for the season.

Seabright has been a fishing centre for about fifty years or more—long, long before the tide of fashion turned in that direction. The population is a mixed one, nearly all nationalities being represented, among them Scandinavians and negroes being prominent. The men are all strong, healthy-looking fellows, with a freedom of manner and charm that is theirs alone. They are steady and clear-headed, for their business is a dangerous one, and ever calls for quick action. A brawl in the settlement is almost unknown, all living closely together on the best terms. They are trusting and trustworthy, for nothing is ever stolen from the boats, left exposed with all the implements of their trade. Their social condition, though one of simplicity, is to be greatly admired in many ways, and altogether their life is very interesting.

Practically nothing but blue-fish are caught by them, for only a very small fraction of the men do any fishing for cod. The season begins in June, when the fish first run in the waters, and lasts until the 1st of November. After this time cod-fishing is indulged in by the few. Their fishing-boats are fourteen and one-half and fifteen feet long, designed for two men, although there is a one-man boat of thirteen feet. At one time dories were tried, but were found impracticable for surf launching and beaching, and were finally given up. The boats are all made by builders in the vicinity, and cost eighty-five dollars. The frame is cedar and the sheathing of oak, with coppered keels. Each boat weighs about three hundred pounds, and is easily handled by two men. There is no regular time for fishing—night as well as day answers the purpose if the fish are only running. When a start is made for day fishing, the fishermen get away at daybreak in the summer, and in the fall at about sunrise. Their day's work may be over before their fashionable neighbors have any thoughts of rising. The boats are rigged with jib and mainsail, and if there is any wind, the fishermen sail out to their grounds. The boat is then anchored, and the sails wrapped around the mast, which is unshipped. There are no ropes other than the main-sheet and jib ropes, and no steering apparatus, the course being made by an oar. A primitive and simple centre board, which is taken out when necessary, is used while the boat is sailed. The fishing-grounds are by no means limited, and the men go from one to fifteen miles away, as they deem best. As soon as they anchor, one man fishes, while the other "cuts bait" continually. Mossbunkers are the only bait used, and these fish are caught in Prince's Bay by regular "bunker" fishermen, and brought around to Seabright by a little sloop. Three to five bushels of this bait are carried out by each boat, and the man who "cuts" keeps at work continually.

The bait-mill is made especially for that purpose, and is very much like a sausage machine. The bunkers are fed into the mill, and ground up into pieces about the size of the end of a man's thumb. These pieces are thrown overboard all the time, and drift away. The bait runs sometimes for half a mile, and is termed a "slick" by the fishermen. The fish follow the "slick" up to its source, and while the man in the stern kindly keeps on feeding them, the line is cast over. The lines are of 18-thread, with 2½ feet of piano wire on the end as a snell. This wire is used to prevent the fish from biting the line, and also as a precautionary measure against frightening them. The hook is baited, and is allowed to sink of its own accord, no "sinker" being used, and while the free-lunch fishes are enjoying themselves, one fellow is sure to be caught with the hook, and his career ended. The fish weigh from three to five pounds each as a general thing, and the catches average five to six hundred pounds, although a lucky strike may land a thousand pounds. All the boats are generally anchored within sight of each other, and if one boat has any luck, and the other men are not catching anything, there is a general crowding over to the place occupied by the lucky man. No signals are exchanged, but every man knows when his fellow has caught something, particularly if he is in hard luck at the time, and the original finders of fish seldom enjoy a monopoly. But it is all in a friendly spirit, and there are no jealousies or exhibitions of meanness.

When the fishing is over, and the men start home, the fishes are all cleaned on the trip. This is an imperative rule, and no fish are ever landed that have not been attended to, for otherwise the foul matter would collect on the beach and breed sickness. When the boat is landed, the fish are packed in boxes, between layers of ice, and a steamer takes them to New York, to Fulton Market. They are sold by the dealers on commission, and every week, on Monday or Saturday, the returns are made by the dealers, and the money sent to the fishermen. The price for catches, of course, varies with the season and the amount of fish caught. As a rule, the season brings in from $1000 to $1200 a man. During the winter season the men store their own ice, cut from the branches and ponds in the rear of the village; and if the ice is exhausted during the summer, artificial manufacture is resorted to. As the stock was lost in the fire this year, the latter plan has been adopted, supplying the need at the low rate of twenty-five cents per hundred-weight.

Every fisherman has a push-cart, valued at $25, which he uses to transport his fish from the boat to the steamer. When the fishing is done at night, lanterns are hoisted from each boat to warn passing vessels, and as soon as the lights of one are seen every man in the fleet gives vent to a yell, which always produces the desired result, and the vessel turns out of their way. Their grounds are visited daily by excursion steamers, but care is taken not to disturb the men who make their living from fishing, and the professional has the first chance, which is as it should be. When a man loses a boat, if he should happen to be a poor man, his brother fishermen contribute to his relief, and this generosity is always alive with them if a needy case comes within their sphere. Each man is free and independent, and no benevolent or "trade" union exists; they can sell their fish at whatever they please, without fear or favor. Such a state of things is truly American, and "boycotts" and like proceedings are unknown to them.

So much for the practical condition of affairs. It was just after the big storm in October that I went down to Seabright to observe more fully the life of the men. The day was chilly and the sky leaden, but the sea seemed as peaceful as possible, and there was no fury in the breakers that tossed high. But here and there was a broken bulkhead, and far back on the sands were innumerable pools left by the sea when it had receded. There were only three boats out that day, and it was explained that the fish do not come to the top at this season for some time after a storm. The boats lay high on the beach, drying their dirty sails in the wind, and the fishermen busied themselves in various ways. To Captain Miller Newman, whom I had the good fortune to meet, is much of my knowledge due, as well as my thanks. I found him at the time in charge of the Reading-Room for Fishermen, which, by-the-way, is an interesting bit. Here are many books and papers contributed by people in the vicinity, and here the men gather to amuse themselves with games and to while away a pleasant hour. The room is open from 3 to 9 P.M. every day, except—and here is where the character comes in—"when the weather is bad it is open all day," as a sign announces. About four o'clock one of the boats came in, and I stood on the beach to watch it. Sail was taken in just before the rollers were reached, and the two men took to the oars. The landing in the surf is the most dangerous part of the proceeding, and a steady head is needed. The men in the boat waited for a momentary cessation in the great rollers that tumbled in. This period of comparative calm is called a "slatch" by the fishermen. As the boat lay to, with her head to the wind, a mighty wave would seem to rise up from beside her, and the boat was lost entirely to view. A moment later she rode over the top of a great billow, and then went down, down, down, until hidden again. For ten minutes she lay there, rising and falling, until suddenly the men bent to their oars, and the boat shot ahead a little distance, and then stopped, while a roller passed under and broke on the sand. Then ahead she went for a few yards, stopping again; and after a minute a sudden calm seemed to come, while the men pulled hard. A small roller came close upon them, and waiting until the curl of the wave had passed, the boat went swiftly in on the top. This performance was repeated several times; and finally a greater wave began rolling in, and lifted the boat up to the shore, when the men jumped out into the shallow foam and pulled the boat high and dry—just in time, too, for the "slatch" had passed. This landing business is frequently very disastrous to the fishermen, although no lives have been lost at Seabright in forty-five years in that manner—so I was informed by Captain Newman.

Sometimes the surf is so terrible that it is absolutely impossible to make a landing, and then the men have to wait for hours, remaining out all night in some cases. Again the feat is attempted by a "greenhorn," or the men get tired of waiting, and lose their heads, and the boat is picked up with terrible force and slung through the air, or else overturned in the twinkling of an eye. Then a yell goes up from those on shore—a yell of concern, of utter helplessness and derision. Men run into the surf to grab their unfortunate friends and insure their safety. But the day's work is lost, tackle, sail, oars, and everything in the boat swept away, and the fisher is fortunate to preserve the boat itself. An "upset" means a great loss to the owner, and they are by no means infrequent occurrences. It is nearly as bad in launching a boat in a heavy surf. A "slatch" is waited for, and a man stationed in the bow seat with the oars. Then the other pushes the boat forward at a favorable moment, and climbing over the stern, gets to work on his oars with despatch. The men wear heavy rubber boots and oilskins in bad weather, and they are no light weight to carry in the water. It is a strange thing, frequently remarked in seafaring men, that many of those who follow the sea do not know how to swim, and it is also interesting to know that *mal de mer* is not an uncommon complaint among the fishermen.

In a fog the men lose their bearings at times, and bring up at points unknown. Sometimes they get totally lost, and are picked up by a passing vessel, and several days may elapse before their friends receive notice of their safety. But the danger in fog is not so great as one might suppose, for there are so many tugs around Sandy Hook, and vessels of all kinds, that a lost man is very likely to be soon found. The summer visitor is not much of a curiosity in those regions, yet they afford much interest at times to the fishermen. There is always a crowd of them at the beach to watch the men land, and their cries are added to the fishermen's yells in case of an accident. But the shriek of the summer visitor and the hoarse brawl of the fisherman make an inharmonious blending of treble and bass.

The transient man of summer is always deeply impressed with the catches of fish, and if he has a bit of Izaak Walton in him, he begs to be taken along the next day. But the fishermen are chary in so doing, and the man who can go on a sure-enough business fishing trip is regarded as lucky. Then they carry rod and reel along, and the fishermen laugh as they tell it. Standing in the bow, the amateur will hook a single fish, and play him for an hour, growing exultant when landing him, while all the while the "slick" is passing out from the stern, and fish by the dozens are hauled in with the hand-line. Sport and business are very clearly defined in a case of this kind. A "fish story" was told to me, and it is worth giving as I heard it. I have no criticism to make upon it. About the fishing-grounds—so the narrator began—swims a fish which is the terror of the fishermen. This marine monster is eighteen to twenty feet in length, weighing at least a ton. They are great round fat things, white beneath and blue on top, and some are distinguished by a white spot on the forehead. These fish are called "horse-mackerel," and have a highly developed taste for blue-fish. They swim into their midst while feeding, and bite the fish struggling on the hook in two, and altogether scare the fishermen. Swimming hard toward the fish, this objectionable pirate sometimes hits the boat and overturns it, and once ran its head clear through one boat. But (I was sorry to hear this conclusion) no man along the coast has ever caught one of these monsters, although they swim so close to the boats that the men may touch them with their hands.

In this open-air life there is an element of kindliness that is always developed, and men are perfectly natural in their manners. Within sight and hearing almost of the metropolis is found this community, knowing Nature in her wildest moods, and living a life of freedom that the sufferers of tenements could never realize. It seems very strange to reflect upon these things. Who ever pictured a suburban Arcadia?

THE LORD CHAMBERLAIN WAS SHOCKED.

AMONG the duties of the Lord Chamberlain of England is that of acting as censor towards all theatrical performances. He has to stand being laughed at somewhat on account of this duty, which, as a rule, he honors more in the breach than in the observance. Each new play must be submitted to him, and he is at liberty to cut out those lines, if such there be, which reflect on the royal family, or that may be too personal and impertinent towards those even not of royal lineage, and those contrary to the cause of religion and public morals. It is also his pleasant duty to see the different plays when they are produced. He has a number of secretaries to do this for him, but it better pleases the fancy of the English newspaper wits to represent him as visiting each playhouse in turn, and scowling at the skirt dancers from the front row of the stalls, while he mentally makes notes to add to the skirts, and to cut away something from the breadth of the lines. This last week he distinguished himself by ordering Arthur Roberts, the comedian of the Gayety company, to change a song which has made the hit of the present production of the burlesque of *Joan of Arc*, in which Lord Randolph Churchill is supposed to be held up to public ridicule. Lord Randolph, as everybody knows, has gone to Mashonaland, and is writing letters to the London *Daily Graphic*. These letters show a vast lack of imagination and a mind not above truffles and clean beds, both of which Lord Randolph apparently expected to find in the darkest jungles of Africa. They have been greatly ridiculed by the English press, and the whole expedition has been put on a par with the other eccentricities of this erratic and brilliant young politician. So Arthur Roberts, who is a mimic of much power, had a song written which was supposed to tell of Lord Randolph's adventures in Africa. He also made up like his lordship. The song was a very great hit. Here are the original words of the first verse; they are not very brilliant:

"Oh, I'm a lord of high degree,
A man of proud position;
For I have been, so it seems to me,
A prominent politician.
But I'd as much as I could stand
Of Parliamentary traffic,
So away I sailed to Mashonaland
In the pay of the *Daily Graphic*.

"I'm a regular Randy-Pandy, oh!
With a beard that's quite the dandy, oh!
And a big mustache that's all the mash
In the great Mashona-landy, oh!
I've a temper sweet as candy, oh!
And a book and pencil handy, oh!
And you never met such a social pet
As the correspondent Randy, oh!"

This version, revised to suit the Lord Chamberlain, runs as follows; it must be explained that the singer plays the part of the Constable of France, who disguises himself in order to cross the English lines:

"Oh, I am the Constable of France,
A man of proud position,
And I led the King a pretty dance
As a prominent politician.
But I'd had as much as I could stand
Of French political traffic,
So I vowed I'd sail to Mashonaland
As a traveller geo-Graphic.

"I'm a regular Jack the Dandy, oh!
A most illustrious grandee, oh!
I'll grow a mustache and be the mash
In the great Mashona-landy, oh!
I've a temper as sweet as candy, oh!
And a book and a pencil handy, oh!
And you never met such a social pet
As your rollicking Jack the Dandy, oh!"

This incident, which seems trivial enough to Americans, has filled the London papers for the last week, and, of course, crowded the Gayety Theatre and sold the *Daily Graphic*. Not long since Fred Leslie, the other comedian of the Gayety, who is well remembered in this country, was stopped by order of the Lord Chamberlain from giving a fancy dance while made up as Mr. Henry Irving in ballet dress. A censor of public performances is a very excellent thing, but in this country private individuals do not need his assistance. There are two notable instances of this: the late Dr. Burchard, whose son stopped Digby Bell from making fun of his father on the stage; and of Dr. Talmage, of Brooklyn, who had John Howson prevented by the courts from making up as Talmage in *The Sorcerer*. Another instance, but of non-interference this time, is the non-objection of General Butler, who is always represented in the burlesque of *Evangeline*, and who apparently has not found it worth while to put a stop to it.

ARTHUR ROBERTS,
Singing the Lord Randolph Churchill Song in *Joan of Arc* before it was suppressed by the Lord Chamberlain.

FISHERMEN LANDING IN THE SURF AT SEABRIGHT, NEW JERSEY.—Drawn by M. J. Burns.—[See Page 866.]

HOMES FOR THE PEOPLE.

BOSTON, NEW YORK, BROOKLYN, PHILADELPHIA, BALTIMORE, AND CHICAGO.

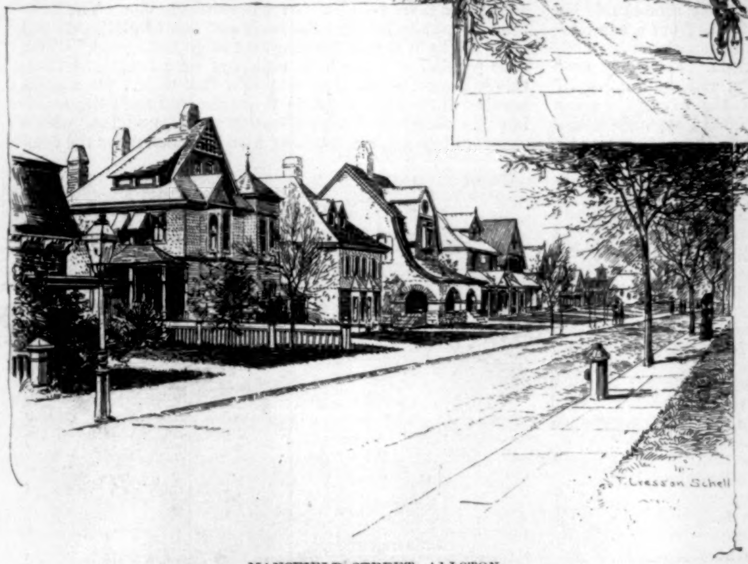
BY HARRY P. MAWSON.—ILLUSTRATED BY F. CRESSON SCHELL.

"Home, sweet home;
There is no place like home."

WE of the English-speaking tongue maintain that in the universal lexicon there is no one word which expresses so much as that little word "home." Of late years, too, a curious use of the word has sprung up. In the good old conservative times "home" meant birthplace, not merely the sleeping or lodging place so familiarly looked upon nowadays as "home." I consider this one of these nineteenth-century barbarisms; to me "home" implies much more than where circumstance or choice has fixed my habitat. But the purpose of this article is to follow the popular lead, and treat of "home" considered as such by the many.

It is of no utilitarian use to discuss the homes of the rich, or even of those who are fairly well-to-do; we one and all understand the barbarity of modern luxury. We know that it is simply a question of expenditure, in which the longest—or, better still, the most generous—pocket-book takes the lead. What we have to deal with is the vast multitude of wage-earners—"the people," in fact, who make the body-politic of our life. It is always an interesting study to me to ascertain and to understand how the mass of the people lives.

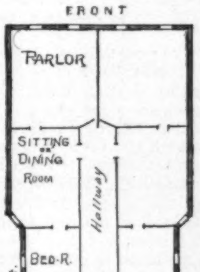
ST. JOHN STREET, JAMAICA PLAIN.



MANSFIELD STREET, ALLSTON.

CHARACTERISTIC EMBRYO FLATS NEAR BOSTON.
(Occupied by from 2 to 4 families, each floor renting for from $15 to $25 per month.)

When the average scale of wages—let me be more polite and call them salaries—is considered, one marvels how many neatly and even well dressed men and women one sees in a day's walk. How do they make ends meet, and how much money does the head of the family have weekly at his disposal? It is as well at the outset that I draw the line at one particular class of wage-workers. In London it is a common reference to speak of a £5 man, and in this country we have his counterpart in the $25 man. Under this classification come a host of artisans and non-skilled laborers, bookkeepers, salesmen on salary or on commission, higher grades of dry-goods clerks; office-men of various capacities, everything that comes under the head of clerks; small dealers struggling against capital and credit, withdrawing each week from their business the smallest possible sum that will pay gas, coal, and rent bills. To be a law-abiding citizen on $25 per week would seem at first glance a task easy of accomplishment, but more difficult of prompt realization, as any real factor in the struggle will cheerfully testify.



PLAN OF A TYPICAL NEW YORK FLAT.
(Double), Renting for $25 per month.

General mode of life varies but little in this country in the Eastern, Northern, and Western cities. Amusements and occupations are common to one and all, and it is only the degree of comfort their homes provide which makes or mars the life of the people at large. "Down East" Boston properly claims our attention as the representative city of New England. For many reasons Boston is a dear place to live in; in that respect it more closely resembles New York. But the causes of this similarity differ greatly. Boston is a very great producer of what people wear, but it is surrounded by a poor soil, incapable of yielding a tithe of what the people eat. New York, on the contrary, is surrounded by a fertile country, generous to the last degree. Old Boston proper still shelters a great many people whose incomes average $1200 to $1300 per annum; but there they find refuge in apartment-houses, more commonly known as "flats"; these are not, however, the eight or ten story buildings we are accustomed to see in the metropolis, but simply three and four story single buildings, with a common entrance for all tenants. One odd feature of these apartment-houses is that the bells are outside the door for each tenant, and instead of having a name to each bell, there is usually a number, *i.e.*, Bell No. 1, 2, 3, 4. In construction these flats are very inferior; as a general rule, they are old-fashioned Boston dwellings, in neighborhoods that have sunk in the social scale, badly ventilated, with few light rooms, and an uncomfortable odor of age and mouldiness. In spite of such disadvantages, these apartments rent for from $25 to $35 a month, being much in demand by people who are employed at night, or others whose occupations compel a very early attendance at their work.

The older portions of Boston are strongly reminiscent of an English town. There is a great similarity in the narrowness and crookedness of the streets; and another curious feature also strongly British—two separately named streets are almost opposite each other, one no doubt intended to be a continuation of the other. For instance, School Street runs only from Washington to Tremont, and Beacon Street begins on the other side of Tremont, and immediately opposite School. It is almost the same with Winter and Summer streets and Otis Street and Temple Place. Amusements in Boston are at about the same figures as in other cities, and the Hub is looked upon as one of the very best paying "show towns" in the country. It is the only city in the United States outside of New York supporting a stock company in a regular season of standard plays. They are also great lovers of music, and without in the least being a musical people in the fullest meaning of that term, they are great patrons of the divine art. Here, too, is another Anglicism. Londoners are distinctly not music producers, yet they support music and musicians better than any Continental city, and concerts pay better there than in Paris, Berlin, or Vienna. And concerts are more remunerative in Boston than anywhere else in this country. This shows a decidedly high intellectual average; it must necessarily have a refining and beneficial influence upon their homes and their home life. This is distinctly noticeable, too, upon a class of people who hereabouts are recruited apparently from our roughest and most illiterate element. I refer to the "shop girls," *i.e.*, "salesladies," in our large establishments. In Boston they are, as a rule, well-educated, polite, of good appearance, and above all ambitious to improve their position, and to do it by educational advantages and force.

The suburbs of Boston are justly celebrated as being among the most beautiful of all our large cities; and as the dwelling-house area of Boston proper is, comparatively speaking, a very narrow one, a very large proportion of those whose vocations bring them to Boston make their homes in the outlying districts or neighboring towns. The Allston, Jamaica Plain, Dorchester, Roxbury, West Roxbury, Brighton, and Charlestown districts of Boston city are favorites among its citizens whose worldly happiness hinges upon $1200 a year. In Charlestown there are a great number of so-called "double tenements," being in reality a two or three story house, with an entrance common to all, each tenement being three or four rooms deep, and renting from $20 to $25 per month. There are also a limited number of single houses, nearly approaching the cottage order, renting from $30 to $35 per month. The other districts named contain a very large proportion of single houses renting from $250 to $350 per annum, of a value from $2500 to $3000, and oftentimes owned by their occupants. The workers of Boston do not confine themselves to Boston and its suburbs only, but within a radius of ten miles of the City Hall, and along the lines of the Boston and Albany, Boston and Maine, Fitchburg and Old Colony, Boston, Revere Beach, and Lynn, Boston and Providence, Boston and Lowell, and New York and New England railroads are gathered the interurban homes of many of Boston's wage-earners. Favorite towns are Chelsea, Somerville, Malden, Melrose, Arlington, Revere, Everett, Medford, and Winchester. Homes here can be rented for from $20 to $35 per month for single houses, or purchased for from $2000 to $3500. Wood is the universal material for building, stone being a rarity even in the swell Brookline district. The roads about Boston are in admirable order, cycling is carried on to an enormous extent, and the ownership of a four-legged horse is not looked upon as an undue extravagance for people in very moderate circumstances, as the interurban character of Boston's daily population makes driving more of the every-day life of the family than is found in the other Eastern cities. The introduction of the "Trolley system" of electric propulsion of street cars has also made a marked stir in the real-estate market, particularly in the direction of Dorchester, Roxbury, etc., the former being particularly favored; it is, in fact, one of Boston's favorite and most beautiful suburbs. Among the old houses in these rural districts the style of architecture is severely plain, not to say hideous. A majority of them are painted white or a dull slate-color, and the result is a nightmare of colorless wooden walls.

However, marked progress has been made in all the newly built houses. Queen Anne seems to predominate; warm houses of brown and red have come into use, and while here and there the architect's passion for originality has led him widely astray from good taste and the proprieties, still, on the whole, the suburban homes of Boston and vicinity are comfortable, compact, and well adapted to the requirements of their occupants. In many respects the wage-earner of Boston

A CHARACTERISTIC NEW YORK FLAT, RENTING FOR ABOUT $25 PER MONTH.

ENTRY OF A NEW YORK FLAT.
(Suites of seven rooms, including bath-room, for $25 per month.)

is distinctly favored over his neighbor, and more particularly that both necessity and choice compel him largely to reside in the rural districts, with plenty of fresh air and the opportunity for exercise as antidotes against the foul air of offices and the close confinement of factories. Considering the opportunity offered, it is somewhat to be wondered at that the building association has not taken firmer hold among the people—in New England they are called "co-operative banks"—for it is only by the employment of this agency that the $25 a week man can hope to secure a home of his own. The high value of land in New York city and Brooklyn does not furnish a very fertile field of operation for the building association. Tenements rearing their heads six, eight, and ten stories high have of late years been dignified by the name "Flat"; $25 a week allows about the same number of dollars for the month's rent of the flat. The better enforcement of the laws concerning the regulating and building of all grades of "tenements" has resulted in the decided amelioration of the conditions of life for the wage-earners of New York and her sister city across the bridge.

I do not mean by this that the real tenement life is any more attractive, health-giving, or as tending towards happiness; but of the class of tenements of which I treat there can be no doubt but what they yield more for the money than they did ten or fifteen years ago. There is no part of New York city in which the $25 to $35 per month flat is not common, although the east side from Eighth Street to the Harlem River and from Third Avenue to the East River contains possibly 75 per cent. of these "homes of the people." The west side of course contains a large number of low-priced flats, but few under $35 that can compare favorably with those on the east at $10 less a month. Another curiosity in family economics in Gotham is that edibles of all descriptions are cheaper on the east side than on the west. The family market basket is replenished for less money, and, on the whole, the qualities between the two sides do not differ appreciably. The average flat at the prices mentioned contains from six to eight rooms, with bath, and sometimes steam heat. The entrance is generally a very swell affair, with a great deal of plate and stained glass, elaborate brass bells, tiled floor, and in those buildings now being put up much is thought to be gained by a high-sounding name. Within the space accorded these "homes" there is almost one universal plan of distribution of rooms. There is of course a front room, or parlor; sometimes a "hall bedroom" on the side; then from the parlor itself a large bedroom, another opening into that, with the dining-room and kitchen *en suite*, and the bath-room a niche opening into the air-shaft. There is, of course, a common entrance to all tenants, the apartments opening on to one stairway, and in flats averaging $40 a private hallway as well; this latter is considered a great boon, as it separates the rooms from each other, consequently giving greater privacy and comfort. The janitor, of course, lives in the basement, and runs the establishment to suit himself.

The building laws compel the usual number of fire-escapes, unsightly but imperative. In all cases where flats of this quality are found upon avenues where business can be carried on, of course the ground-floor is always devoted to stores. They vary greatly in character, all the way from the peace-destroying gilded rum-shop to the staid and friendly "funeral director," *i. e.*, undertaker. Almost every vocation and calling finds representatives in these stores. Real-estate and insurance men abound; barbers, cigar dealers, grocers, tailors, furniture and upholstering dealers, hardware, stationery, candies, florists, dry-goods and notions, drug stores innumerable, fish dealers, laundries, boots and shoes, gents' furnishings, trunk-makers, hatters—in fact, a walk on one of these avenues and any reasonable person can fit out himself, his family, and his home. And yet of the 2,000,000 people who live in New York, but 13,000 own the roof over their heads. It is evident from these figures that the $25 a week man and his family have veritably but *un pied-à-terre*. A favorite source of amusement for the "lady occupants" during the "slack hours," when the kitchen fire is out or the babies asleep, is to "loll" out of the front windows in solid rows, taking in the street fights, the fires, and other excitements attendant upon a metropolitan existence.

It is really wonderful what a difference exists between New York and Brooklyn. The latter has all the simplicity of a country cousin, but who tries to ape the manners and looks of his city relative. In this case the difference is all the more remarkable because of the close alliance of the two cities from a commercial or social stand-point. As far as homes are concerned, Brooklyn has the best of the comparison. Relatively considered, property is cheap in Brooklyn, and the number of separate houses within the reach of the average worker exceeds New York's ten to one; in fact, a separate house for $35 a month does not exist in New York at all. Among the separate houses in Brooklyn are a very large number of old-fashioned two-story frame dwellings with high stoops, and sometimes a portico over the stoop; another class are two-story brick houses with doorway level with the street. Buildings such as these do not render a city architecturally handsome, but they provide a world of comfort and independence for their occupants. Flats there are, too, in Brooklyn, seldom so high as their New York prototypes, and renting for from $20 to $25; such as across the bridge would readily bring from $32 to $35. Brooklyn's elevated roads and electric cars have done wonders in building up the outlying suburban districts. Ridgewood, Rockwood Place, and along Flatbush Avenue, have all developed wonderfully within the past few years in providing suitable homes for people of modest wants and capacities. What Brooklyn really needs for its further development is another bridge with the metropolis—say at about Twenty-third Street. This of course would materially benefit New York in providing an outlet for her surplus population; and from another stand-point it would also benefit her greatly in procuring for thousands of her workers better homes than New York provided for them, and at less cost. With numberless controversies still bright and fresh about the one "Brooklyn Bridge," it is more than likely that another is in the dim future.

There is a lot of "cheap wit" current throughout the country about the city of Penn. Somnolent she may be, staid she no doubt always will be, and perhaps there is nothing which does run through Philadelphia save the river Schuylkill, but, for all this, she is *the "city of homes"* the world over. When Penn and his disciples laid out the Quaker City, they designed that all streets should cross each other at right angles, and that alleyways and smaller streets should intersect the larger ones, furnishing rear outlets to the houses, besides light and air, and thus facilitating traffic throughout the city. Penn's idea has been much abused in one respect. These alleyways and "side streets," as they are called, owing to an atrociously bad city government and a "cobble-stone ring," are not the blessing and convenience they ought to be; they are wretchedly paved, and frequently kept indifferently clean. In localities in the older parts of the city it has not always been possible to provide alleyways or a small street in the rear of the blocks; so a two-foot alleyway between each pair of houses, connecting with both yards and opening on to the front street, affords egress and exit to the rear of the house. This idea has also been elaborated in many of the better class of houses, where the side yards of each pair of houses open on to the front street, closed by a handsome ornamental gateway; but of course this requires an exceptionally wide lot, so there are few if any being built in that style. Philadelphia is, properly speaking, divided into five separate districts, in all of which the wage-earner finds equal accommodations in his home. These are the old city south of Market Street, from Market Street north to the city limits, in the Kensington and Richmond districts, the Germantown and Manayunk suburbs, and West Philadelphia. The Philadelphia houses of single width are, with rare exceptions, designed as to the interior upon one plan. There are no basements; the parlor, dining-room, and kitchen are on one floor, but not connecting, except as to dining-room and kitchen; these usually open into each other, and are reached from the front door by an entryway which parallels the parlor; the stairway ends opposite the entrance to the parlor, and runs up through the middle of the house. One feature of Philadelphia houses peculiar to Quaker City homes is the "back building," somewhat similar to but much deeper than the New York "extension"; the dining-room and kitchen are in this extension on the ground-floor, the sitting-room being on the second floor; and in four-story houses there are two, and sometimes three bedrooms over the sitting-room. The bath-room is usually between the back and front buildings. All these are light rooms, opening on to the "side yard," which runs parallel with the back buildings on a twenty-foot lot; this side yard is usually about four feet wide. On a great number of the streets, chiefly the numbered ones, the buildings are constructed with stores on the ground-floor, with a side door to reach the dwelling above. Sometimes the family live over the little business carried on in the store below, or it may be rented separately. Of course the famous "white shutters" must not be forgotten. But few new houses are supplied with these. Philadelphia has progressed a little. But they still wash down the sidewalks on Saturdays. This, in a general way, describes all Philadelphia houses, the smaller and cheaper houses being the larger ones in miniature. Philadelphia pressed brick, owing to the exceptionally fine clay found in the county, is considered the best brick made, and forms the material for the majority of the houses, and, to a great extent, the pavements also; but in the latest building operations brick pavements have been discarded and various patent pavements substituted. As a usual thing a Philadelphia block contains from thirty to forty houses, and when one considers that a two-story brick house, with gas throughout, a bath-room with hot and cold water—six rooms in all—with a small well-fenced and well-paved yard, can be rented for $13 50 per month, there need be no sneers at the old Quaker City when she provides her people with homes like these. I clip from the Philadelphia *Ledger* some of its real-estate notices. They are instructive reading as compared with similar "ads" in other cities.

RIDGEWOOD AVENUE AND LINWOOD STREET, BROOKLYN, EAST NEW YORK.
(Floors renting for from $18 to $25 per month.)

$1600 ONLY, WORTH $2000, OR FOR RENT, ONLY $12 PER month—Those new two-story, five-room houses, lots 14 x 66; bath, gas, hot and cold water; polished brass gas fixtures; gold paper; cemented cellars, with heaters; not built on filled-in ground, but on that as solid as a rock; street as wide as Broad Street. The owner of these houses owns considerable ground in this neighborhood, and, as a means of improving same, is offering these houses at cost. Terms very easy. Allegheny Avenue and Thompson Street, one square west of Richmond Street. Depot of red cars on Second and Third Streets line within a square.

WEST PHILADELPHIA PROPERTY.

4— Haverford, 9 rooms	$18 00
4— Haverford, 9 rooms	18 00
3— Melon, 7 rooms	16 00
8— North Forty-fourth, 7 rooms, large lot	14 00
4— Wallace, 6 rooms	13 00
4— Wallace, 6 rooms	13 00
4— Prescott, 6 rooms	12 00
5— Chelsea, 4 rooms	8 00

CITY PROPERTY.

FOR RENT—DESIRABLE DWELLINGS.

2— South Sixth Street, 11 rooms	$40 00
1— Ellsworth Street, 5 rooms	14 00
1— North Eleventh Street, 3 rooms	8 00
1— Watkins Street, 4 rooms	10 00
2— Columbia Avenue, 10 rooms	28 00
2— South Street, 4 rooms	9 00
9— Sartain Street, 8 rooms	20 00

The highest-priced house on these lists is $40 per month, and that is in an old section of the city, with eleven rooms, and from its location could easily be let for business pur-

ROCKWELL PLACE, NEAR LAFAYETTE AND FLATBUSH AVENUES, BROOKLYN.
(Floors renting for from $18 to $25 per month.)

poses. Philadelphia has suffered very greatly for want of proper rapid transit; but now that the Reading Railroad Company has at last accomplished its Market Street terminal, the Northeastern Elevated also having acquired its charter, there will no doubt be greater facilities for reaching the far-off sections of the city. Apart from this, Philadelphia has the most complete system of street railroads in the world; almost every street is gridironed, and while, as is usual with all railroad companies, they have shockingly abused the privileges conferred upon them by a too trusting Legislature and City Councils, they have undoubtedly worked immense benefits to the citizens, for Philadelphia is above all things a city of "magnificent distances." A street car going somewhere, with a system of passes and exchanges, rides by or within a stone's-throw of every "home" in the Quaker City.

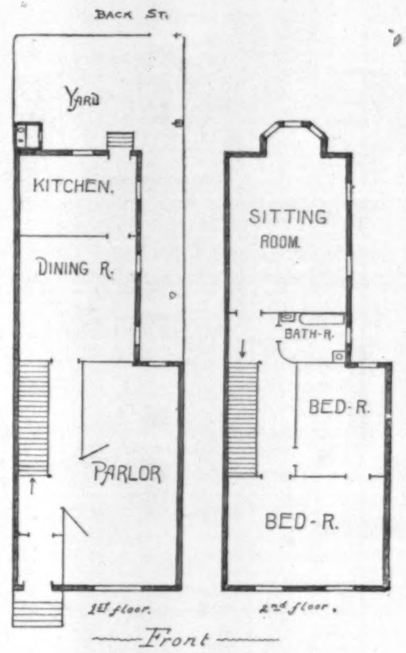
Philadelphia is also the headquarters of the building association. There are some twelve hundred of these organizations in Pennsylvania, nearly one-half of them being located in Philadelphia; they have done much to develop the "small homes" of the Quaker City, having been honestly and efficiently managed. The theory and practice of the building association is the spirit of co-operation. Land is cheap, opportunities for owning one's own home are easy to acquire, and the building association has been the *modus operandi*. One must not forget, too, her far-famed markets, superbly supplied with the finest and choicest farm produce in this country.

Philadelphia undoubtedly does not possess that metropolitan something which inspires enthusiasm and a general condition of "hustle," but for the wage-earner and man of humble means she provides more comfort, happiness, and independence for one of Uncle Sam's dollars than the same wage-earner can secure for five times that sum in any other city in this country or in foreign parts. Strange to relate, Philadelphia is a good theatrical city, in spite of its Quaker antecedents. "Home life" must have its pleasures and distractions, and theatres are both numerous and prosperous. In addition, she is splendidly supplied with public institutions, galleries, museums, and libraries, so that "all the comforts of home" exist upon no mean scale for the wage-earner and mechanic.

When the traveller reaches Baltimore there is an aroma of the sunny South in the air, and a soft "burr" upon the tongue of the passer-by. There is, too, a *dolce far niente* in the general make up of the town, a provincialism that is both pleasant and surprising. The Southern way of *laisser-aller* is on all sides of you, the street-car "horses" are mules, the "raw box" is in sight, and the "darky" of the old times walks her streets. You feel you have entered another section of these great United States. Architecturally speaking, Baltimore has tarried by the wayside. From a geographical stand-point it does not attract much emigration; its commerce has increased, but only as a cheap tide-water port with good railroad facilities and small charges to shippers. In the matter of "homes" for its people, it has stood practically still. In the "old town" on the east side of the city, on Caroline Street near Pratt and other contiguous thoroughfares, a small brick dwelling with a high flight of white or green steps that run up the front of the house, often sideways, brings $18 per month without bath, gas, or furnace! Here, too, there is a cellarway opening on to the sidewalk, and often the old plantation "moke" is seen sawing in two huge fire logs for the winter's blaze. But this is not peculiar only to the cheaper grade of houses, but also to many of the stately but old-fashioned homes. Baltimore can rightfully boast of her splendid farm produce and of its cheapness; in this respect she holds her own with any city in this country.

On Division Street, near Lafayette, a new dwelling section of the Monumental City, there have been erected a number of "small homes" of eight rooms each, with bath, gas on first floor, but no furnace and no inside closets. Just why gas should stop short at the first floor shows how little progress this old town has made. Darkness, or candles and the treacherous coal-oil lamp illuminate the upper portions of these homes. Beyond Druid Hill Park and towards the old race-course building operations in cheap houses have been carried on more or less successfully; but the lack of proper "rapid transit" has hampered the complete success of these schemes. Now, however, that mules are to be succeeded by the cable and will shortly disappear, Baltimore will no doubt improve in the matter of "small homes," and its wage-earners have more comfort for a less number of dollars than they have heretofore enjoyed.

Westward ho! Out on the prairie the Windy City holds her sway, dignified now by the preparations for a World's Fair. Columbus never dreamt to what reckless use his name would be put, as a Columbian Fair, or perhaps he might have hesitated about his voyage to the West in search of new lands to glorify the reign of Ferdinand and



PLAN OF TYPICAL TWO-STORY HOUSE IN PHILADELPHIA.
(Renting for from $18 to $25 per month.)

Isabella. With the Fair now more of an actuality than other parts of our country have generally conceded, how and where the people of Chicago live casts an interesting shadow upon the festivities in prospect. The Chicago River, or ditch, more accurately speaking, cuts the city into three distinct sections—the North, South, and West sides; there is also a corner called the Northwest Side, but is in reality part of the West Side proper.

Chicago has within a year absorbed legally the whole of Cook County, and has thus acquired *de jure* as well as *de facto* all of the North and South Side suburbs; on the West Side the city limits already extended almost to the county lines. Both the North and South sides contain, of course, a certain percentage of wage-earners' "homes" of the class I have treated of, but property is much higher in both these sections, and so it comes that the great majority of this class find their sleeping-place within the classic precincts of the West Side. It must be said, in the interest of truth and historical accuracy, that a more ugly town than this West Chicago is, it would be hard to find. And it is ugly beyond reformation. Single flats of four stories abound, built generally of a cheap brick with slate stone trimmings; gas, of course, on all floors; water in plenty, and a bath-room to every flat; there are no elevators in these flats, nor any cellars. In fact, strictly speaking, there is not a cellar in Chicago, as to excavate below the basement depth means to strike water. The type of single house is a two-story frame cottage, built in pairs, with a high stoop, a porch, and usually a small yard in front, which, with the more tasteful and refined tenants, presents quite an array of garden flowers. Most of the pavements are board walks down the centre of the footway, bordered on either side by grass-plots, and on the street side, sometimes a row of trees. The streets when paved at all are remarkably well done; patent pavements, Belgian blocks, and macadam are all represented.

The plans of the Chicago "flats" follow those of New York very closely, except that they are rarely so well built or finished; the rent will range from $20 to $40 a month, and average about $10 a month cheaper than Gotham. A great many of the Chicago blocks are cut in two by alleyways or small streets, something on the Philadelphia plan. These are seldom paved and never cleaned; back fences always retain the natural color of the wood; paint is plentiful but time is scarce out there. The only elevated railroad that has so far begun an existence is known as the "Alley Road," because its tracks run down the alleyway between Wabash Avenue and State Street. The Philadelphia Syndicate has also absorbed in Chicago most of the street-car lines, and "cabled" them to the distinct advantage of "homes" for the people. They get better and quicker transportation, cleaner streets, and, being enabled to go out into more distant and cheaper districts, perhaps in time the class of buildings may improve; at present it is distinctly bad. The cost of food supplies is probably cheaper by 25 per cent. in Chicago than in any other city of relative size in the country. Poultry, game, vegetables, butter, eggs, milk, fruit, meats, and even fish, are remarkably cheap and plentiful. There are no market buildings like the Farmers' Market in Philadelphia or Fulton Market in New York; the green-grocer and butcher furnish all the supplies, much on the New York principle. In fact, in most aspects of its life, Chicago is a weak imitation of the metropolis. Amusements are chiefly Eastern successes; the lake unfortunately affords comparatively little recreation; it is too rough and uncertain for much rowing or sailing, and excursions by steamboat are not looked upon with much favor. But Chicago, for all these drawbacks, is a great city for the "hustler"; the spirit of adventure and daring speculation is abroad among the people; there is a constant "boom," the latest and biggest being the World's Fair. This will have a tendency to enhance the value of South Side real estate so much that the wage-earner who luxuriates on $25 per week, will as the Fair approaches its opening, find his rent so much raised that he will be compelled to find a cheaper "home." As is likely, he will not migrate to the North or West Side, but migrate further south, to Pullman, for instance, where really exceptional opportunities are provided for the working-man, and more nearly approaching the comforts of a Philadelphia "home."

Pullman is indeed a country town of homes with city conveniences. There are altogether about six thousand mechanics finding employment there, most of them, of course, employed at the great shops of the Pullman Company. The average rental in Pullman of single houses is $14 per month. Flats containing from two to five rooms, rent from $6 to $9 a month. There is still another kind of flat, where each family has a separate entrance, with five good rooms and a basement, renting for from $14 to $16 a flat. Separate sinks, water-traps and closets are provided for each family. The single houses are really models of comfort and convenience. They are all solidly built on stone foundations; main walls of common brick, and fronts of an excellent quality of pressed brick. The interior woodwork is of pine in natural finish; in the basement, which is so well built as to be perfectly dry, there are the laundry, steel-plate furnace in a room by itself, coal-bin, store-room, etc. On the first floor there are the parlor, hallway, dining-room, kitchen, and necessary pantries. The second floor contains four bedrooms, bath-room, with stationary wash-stand, hot and cold water, and closets. The third floor contains three comfortable sleeping-rooms. The sewerage is iron throughout, with necessary catch basins. There are also open fireplaces in the parlor and front bedroom. Some are built with bay-window fronts, others with covered piazzas. Each house has a large back yard, with wood and coal shed. The Pullman Company own all these properties, and maintain them in first-class condition. A great number of the dwellings are heated by steam. The grounds are terraced and planted with flowers and shrubbery.

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TYPICAL PHILADELPHIA DWELLINGS.

1. Fortieth and Poplar Streets. Lot 17 × 100. Seven Rooms and Bath. All Conveniences. Thirty Minutes by Horse-car, and Ten Minutes by Steam from centre of City, renting for $23 per Month. 2. Part of a Block of Forty Houses. Six to Eight Rooms. All conveniences. Renting for from $12 to $20 per Month. 3. St. Mark's Square. Six Rooms and Bath. All Conveniences. Renting for $13 50 per Month.

The front yards are not fenced, but left open, so as to give to the streets the appearance of parks. Pullman is charmingly situated on the lake, within easy riding distance of Chicago; the rentals are not more than three-fourths as much as the like amount of room brings in Chicago, and there is nothing in the World's Fair city to compare in attractiveness to these Pullman homes.

They say comparisons are odious, but the object of this article has been to place before my readers a frank and explicit statement of what constitutes happiness, home, and prosperity for the average wage-earners in several of our large cities. Life in American cities does not present, one as compared to the other, that variegated and local coloring which is the charm of foreign countries; perhaps an exception in favor of this rule may be made as to New Orleans, whose Franco Spanish origin lends to it an individuality possessed by no other city in the United States. Outside of the city on the Gulf, actual existence does not differ materially as between the rival cities. Chicago is said to be a summer resort, but the confidence of the public in this claim has, I am afraid, been rudely upset when it sees 100° in the shade recorded for the World's Fair city. New York is not a summer resort, but there is no city in the world where there is so much of amusement and recreation within easy and cheap reach of the people. If only a better means of interurban transit were in existence to give the people better "homes," New York might be called an ideal city for poor and rich alike; but so long as the mass of the "people" are herded together under one roof, there cannot be that freedom of life which provides a real "home" and health-giving surroundings. Boston is exceptionally well situated for healthfulness. The climate in the summer is, on the whole, equable; the winters are apt to be pretty severe, and an east wind is not a "thing of joy forever." Yet as the "homes" in Boston are largely suburban, and many of them can be called even rural, the average worker has considerable comfort and freedom in Boston. Baltimore does not, on the whole, stand the test of comparison. They need to wake up there, and give the people better homes and more of them; "homes" that earn the name, and that compare with other cities in progress and enlightenment.

I have said before that there is a great deal of cheap wit afloat at the expense of the city of Penn. Some of it is perhaps deserved; much of it is launched in a spirit of ignorance and envy. Philadelphia can well afford to listen unmoved to these ribald jests; for what city in this or any other country has earned the title, "a city of homes"? It is better than being called a "Windy City," or a "Monumental City," or the "Hub of the Universe," or, indeed, a "City of Churches," and means more to hundreds and thousands than life in a tenement eight stories high in the "Empire City."

As a matter of statistical comparison, it is well to state here that Philadelphia has 235,033 buildings of all kinds; the letter-carriers covering 91½ square miles of territory, against 120,000 buildings in New York, and 41 square miles of territory; 128,000 houses and 61 square miles of territory in Chicago; and 53,000 in Boston; and probably something less in Baltimore. Of these 235,000 and odd buildings in the Quaker City, 83,068 are two-story dwellings—read these figures attentively, it means a "home" for from $8 to $13 a month—96,771 are three-story dwellings; a beautiful little "home," three stories high, for $25 a month and even less. I find that perhaps I may have extolled the "homes" of the Quaker City seemingly at the expense of the other cities discussed, but to those acquainted with the facts, my enthusiasm is not out of bounds. If the old adage "A man's home is his castle" was ever proved, it is in the Quaker City.

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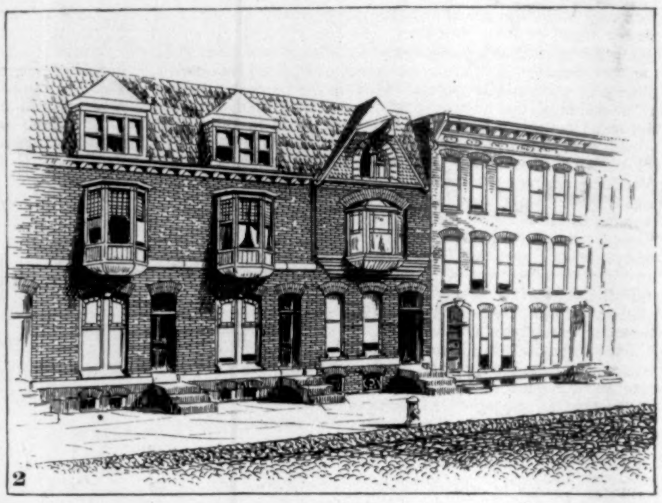
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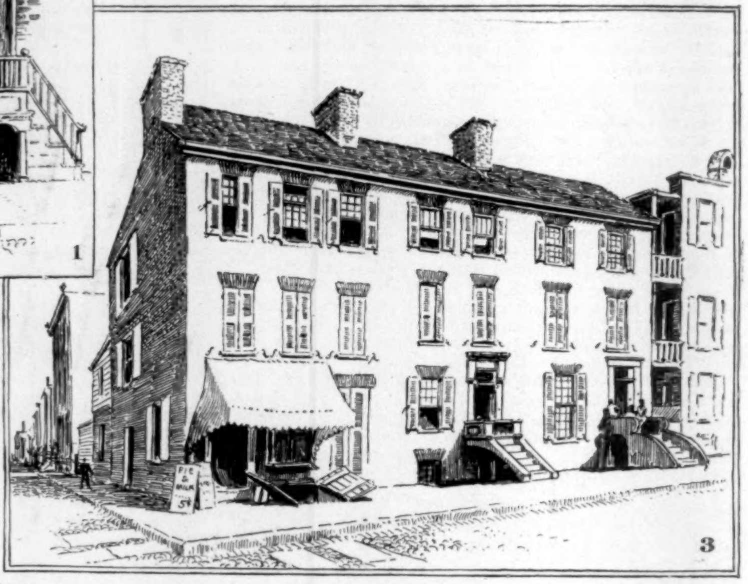
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BALTIMORE DWELLINGS.

1. Caroline Street, near Pratt Street, East Side, Old Town. Nine Rooms. No Bath, Gas, or Furnace. $18 per Month.
2. Division Street near Lafayette Avenue, new part of Town. Eight Rooms and Bath. Gas on lower Floors. No Furnace, no inside Closets. Bay-window Houses renting for $21 per Month. Adjoining Houses for $22.
3. East Side, Old Town. Six and Seven Rooms, no Conveniences. $12 and $15 per Month.

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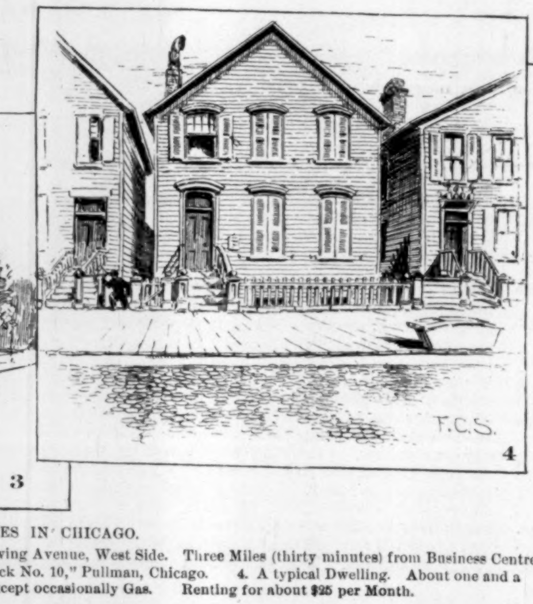

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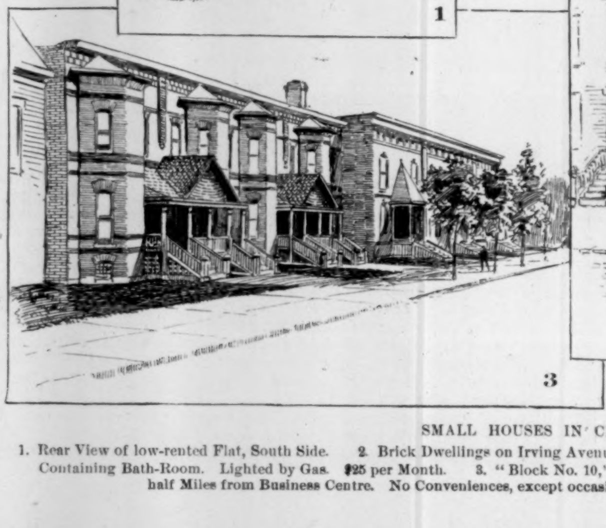
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SMALL HOUSES IN CHICAGO.

1. Rear View of low-rented Flat, South Side. 2. Brick Dwellings on Irving Avenue, West Side. Three Miles (thirty minutes) from Business Centre. Containing Bath-Room. Lighted by Gas. $25 per Month. 3. "Block No. 10," Pullman, Chicago. 4. A typical Dwelling. About one and a half Miles from Business Centre. No Conveniences, except occasionally Gas. Renting for about $25 per Month.

THE PROGRESS OF GUN-MAKING IN THE UNITED STATES.

BY LIEUTENANT F. DE T. CLOTH, OF THE FRENCH ARMY.

The long spell of peace which the United States have been enjoying for a period of nearly thirty years has had a stagnant effect upon the progress of the manufacture of domestic ordnance. Only in small arms and machine-guns has this country maintained its place. Recently, however, the thinking part of the population has become cognizant of the fact that peace is the only time allotted to a nation to prepare for war. Whenever war clouds gather on the political horizon of the world, the American mind begins to feel uneasy. This uneasiness does not prove so much that the population of this great commonwealth is conscious of its utter defencelessness in case of war, as it proves the fact that the Union is developing fast from a second-rate power into a great power of international political importance.

Without a coast defence, without a sufficient navy, without an adequate army to preserve even peace within her own borders, the country would fall a prey to the first onslaught from outside. Superior force alone is the test of right and wrong between nations, and the only verdict that is given is given from the mouth of the cannon.

What have the United States hitherto done in the way of providing for an adequate armament, such as modern times require in order to be safe at home? Nothing; practically nothing.

The efforts of the War and Navy departments in this direction are just as reprehensible as the actions of the legislative bodies are dilatory and unpatriotic.

Captain Rodgers Birnie, U.S.A., to whom the writer feels greatly obliged for valuable information on the subject under discussion, is perfectly right when he says, "The trade of munitions of war obeys, like every other industry, the inevitable law of supply and demand."

The demand for small arms for general use in this country, and the fact that the cost of manufacture and improvement of these arms places the matter within reasonable control of private industry, and does not necessitate a very large expenditure on the part of the government, have maintained the necessary skill in the art, and have enabled American private manufacturers to compete successfully in the markets of the world. Very different, however, is the case with heavy guns. For these the government alone can create a demand. During the civil war, when the demand for guns was strong,

the American system of producing cast-iron guns developed into an excellent one. Since then little or nothing has been done until lately. The little that has been accomplished is due to the united efforts of the army and navy, which within the past few years have with marked unanimity advocated the construction of steel guns, and have entered upon their manufacture to the extent of available appropriations by Congress.

The guns made in the United States previous to Rodman's improvements in the manufacture of cast-iron guns are of little interest, with the sole exception perhaps that some of the old principles have been successfully applied to the new guns now made.

Professor Daniel Treadwell constructed his first gun as far back as 1841. It was made of short cylinders of wrought iron, which were welded together. Each of these cylinders consisted of small rings, which were welded one over the other. Later on Treadwell changed his method, and made single cylinders of steel, round which he wound spirally a bar of iron. The cylinders were then welded together, and the gun formed by means of moulds and dies which were connected with a powerful hydrostatic press. A screw plug was used to close the breech, while the trunnions were fastened to a band, and the latter screwed on the gun.

The idea of the constructor evidently was to make a gun which would be of uniform strength in every direction. These guns were tested both by the army and navy, and the smaller calibres proved a success, while the large ones constructed for the navy did not. Whatever value one might attach to Treadwell's method of construction, the fact remains that his principle of the built-up gun was right.

After Treadwell came Chambers, who obtained an American patent in 1849, which is worthy of note, as it describes a device for a slotted screw breech *fermeture*, a hinged movement of the breech mechanism when withdrawn to clear the way for loading through the breech, a loading tray or sleeve inserted in the breech to cover the threads in loading, and the biconical shape given to the shrinkage surfaces of the hoops to afford longitudinal strength.

This gun was a wrought-iron breech-loading smooth-bore, consisting of one solid tube from breech to muzzle, on which were shrunk several layers of hoops. It is a somewhat singular coincidence that the modern French breech mechanism, which is considered superior to any other, is constructed on similar principles to the one used by Chambers.

The next great step forward was made by the late General Rodman, who introduced a new method of casting, and to whom we are indebted for the cast-iron smooth-bore guns. These guns became great war engines, but this fact alone does not imply that the preference of the American people should be still given to them, now that they are of no value to anybody except perhaps the antiquarian. Rodman's improvement chiefly consisted in cooling his gun from the interior, a process which at present is one of the first principles of perfect gun-construction.

At present there are still 210 8-inch, 998 10-inch, 305 15-inch, and 2 20-inch cast-iron Rodman smooth-bore guns available for actual service.

In case of necessity they would be a little better than nothing, provided that one does not hope to pierce the armor of a modern ironclad with them; but to expect any effective work of them nowadays is simple folly. Even the 15-inch cast-iron smooth-bore gun is only capable of throwing the shell, which weighs 450 pounds, about three and three-fourth miles, and to do this it must be fired at an elevation of at least twenty degrees. The chief trouble with all smooth-bore guns is that the muzzle energy soon dies away.

Though the Parrot guns are now classed as retained calibres, which means that they are no longer to be used, they well deserve to be mentioned, considering not only that they form the link between the smooth-bore and the rifled gun, but also because of the important rôle they played during the war.

After the Parrot rifle followed a long lull, during which no attempts whatever were made to improve gun-making in this country. In 1872, however, Hitchcock proposed a 9-inch muzzle-loading rifle, which was made by welding together disks of wrought iron in such a manner as to finally produce a solid wrought-iron piece.

The inventor supervised the work himself at the Springfield Armory, but had to abandon his project after three years' labor and the expenditure of a large amount of money. The verdict was that the construction was not only too costly and difficult, but that it was impracticable.

In 1875 the Mann 8-inch breech-loading rifle was tested at Sandy Hook, after which it was sent to Philadelphia to figure in the Centennial Exhibition. It was a peaceful task the gun had to perform, and it did it well.

The body of the Mann gun was a tube open from end to end, and counterpoised at the trunnion bearings in the straps. The trunnions connected the whole system with the carriage, and formed a part of the side straps, which in their turn were supposed to support the longitudinal strain caused by the pressure on the breech block.

The breech was opened or closed by raising or lowering it. The breech block, whenever closed, covered the breech end of the tube, and supported the gas-check ring. After a few improvements in the construction of the breech, the gun was tested at Sandy Hook in the year 1884. At the twenty-fourth round it burst, and consequently proved a failure. The fracture showed no defects in the metal, but it had become evident during the firing that the side straps did not hold the breech block up to its place, as the breech of the gun was slightly raised from its place by the firing.

The idea of making a wire-wound gun first occurred to Dr. Woodbridge as far back as 1850. A gun of this kind was then constructed at the Washington Navy-yard, and tested in 1865 by Major Laidley; 1327 rounds were fired from it, when the trunnion band broke loose. Seven years later the War Department decided once more upon the construction of a wire-wound muzzle-loading 10-inch rifle. The tube was of thin steel, round which wire was wound somewhat larger than the intended bore. When the tube was wound, the whole mass was enclosed in a tight case to protect it from oxidation, and heated therein to such a degree as was required for the fusion of the metal to be used for consolidating it. The soldering metal was then run in, filling all the interstices of the mass. After this was done, and the gun properly cooled, it was bored in the ordinary way. Great hopes were placed in this gun, but, much to the dismay of the constructor, the gun was an utter failure, and pulled apart longitudinally when tested with 80 pounds of powder after a total of 93 rounds.

Discouraging as the fact was, the construction of wire-wound guns was not abandoned, and the building of two more was commenced by the Getty board as a cheap speculation. The work was begun in 1884, but suspended in 1886, no funds being available then to continue the work.

The interesting feature of these two guns was that one of them was to be a 10-inch cast-iron rifle, partly wrapped with wire, weighing 29 tons, and measuring 23¼ feet. The second gun, the construction of which was also begun, was considered a decided advance on the former. It was intended as a 10-inch steel gun with longitudinal bars, and wire-wound from breech to muzzle. The design represented the gun weighing 22 tons and measuring 31¾ feet. The longitudinal bars were introduced to give the gun longitudinal strength. The steel bars were procured from the Otis Iron and Steel Co., in Cleveland, and were cold rolled at the works of Jones & Laughlins, Pittsburg, Pennsylvania, while the wire was drawn at the works of the Trenton Iron Co., at Trenton, New Jersey.

The object of wire-wound guns is that excessive charges may be used in order to obtain a higher initial velocity, and consequently a greater penetrating power.

The converted muzzle-loading rifles constitute a system of built-up guns in which the shrinkage of the casing is negative. The casing is formed of the Rodman smooth-bore gun from which $\frac{15}{100}$ of a calibre thickness is removed from the cast-iron to enlarge the bore for the reception of the comparatively thick tube of reduced bore. This tube consisted of either wrought iron or steel. The former were procured from Armstrong, and the latter from the Bochum Steel Co., Germany. Some of these converted guns, especially the 8-inch gun, proved a success, while others did not. The trials of these guns of larger calibre showed the unsuitability of muzzle insertion, and led to the substitution of breech insertion for all guns of larger than 8-inch calibre.

The converted breech-loading rifles were the next step in advance, and Krupp's breech mechanism was adapted to this type of gun. The general features of tube construction in these rifles were the same as in the breech-insertion muzzle-loaders. But the jacket was made of a heavier steel piece, which projected to the rear in order to receive the Krupp *fermeture*. The construction of converted breech-loading rifles was continued, but the quality of the steel used was too poor, and the two trial guns, which were severely tested, soon proved a failure, and consequently hampered the advancement of steel-gun construction in this country.

The combined cast-iron and steel guns are of importance, and form the link between the old and the new methods of gun construction. The modern built-up steel rifle is the outcome of this transition. It is proper to make mention of the combined cast-iron and steel guns in the history of the progress of gun-making. Including rifled mortars, three different types of this construction are now in existence.

1. A 12-inch breech-loading rifle made of cast iron, but lined with a steel tube, which is inserted from the rear, forming about one-half the length of the bore.

2. A 12-inch breech-loading rifle with cast-iron body, re-enforced by steel hoopings, and provided with a steel tube lining similar to that in the first gun.

3. The 12-inch rifled mortars, steel-hooped. This latter gun is a short rifled piece made of cast iron, and re-enforced by a number of steel hoops. It measures 10 feet and 9 inches, and weighs 13¾ tons. The powder charge is 80 pounds, which is sufficient to insure a range of about six miles. The loaded shell weighs 630 pounds. The highest powder pressure to the breech of the mortar when fired does not exceed 28,000 pounds to the square inch.

It is the idea to use this gun in case of a foreign vessel being able to run the gauntlet of the big rifles, and trying to force an entrance into a harbor. The recent trials at Sandy Hook have given the most satisfactory results in every direction. The mortar tested was built by the Builders' Iron-Foundry of Providence. One of the tests at Sandy Hook was to ascertain the armor-piercing capacity of the gun. With a properly reduced charge of 51 pounds of powder, a steel shell weighing 628 pounds scattered a 4½-inch steel plate. At present there is no ironclad afloat having more than 3¼-inch deck armor, which, as the tests show, would be insufficient against a shell from this formidable war engine. The new mortar batteries which are now under construction round Long Island Sound and New York Bay will be armed with these and pure steel mortars. The old smooth-bore mortars were altogether unreliable, and marksmanship was inaccurate with them.

None of the combined cast-iron and steel 12-inch breech-loading rifles have yet been delivered, and, in the opinion of most experts, the United States would save money if they never were. Should the steel-tubed and the steel-tubed and hooped guns ever be finished and tested, the trial of them might furnish some interesting facts with regard to the practicability of making a safe medium-power gun principally of cast iron.

In 1887 Congress made sufficient appropriations for the purchase and completion of three 6-inch steel cast breech-loading high-power rifles of domestic manufacture. When these guns are finished, they will be required to fire a 100-pound shell with an initial velocity of at least 2000 feet per second. The powder charge for these guns will probably be 50 or 52 pounds, while the pressure should not exceed 15 tons. It is expected that this gun will cost less than the 6-inch built-up forged steel gun, made also of entirely domestic material.

As the methods of manufacture of these steel cast guns is not known, it is impossible to pronounce an opinion on them before they have been tested. But whatever the result may be, they mark the first step in the manufacture of steel cast guns in this country. Whether 12-inch steel cast breech-loading rifles can be made successfully remains still a matter of conjecture. It is certain that in heavy calibres they could not be manufactured cheaper than the built-up steel rifles. The heaviest casting for a built-up steel rifle does not exceed 40 tons, while the casting of the steel cast gun, if made hollow, would be about 100 tons, and if made solid, at least 120 tons.

Regarding this kind of rifle, it would be well to remember that foreign countries have already made all these trials, and that all of them have now reached the conclusion that the built-up steel gun is at present the best and most reliable one. Though this type of gun represents the ideas of three Americans, namely, Treadwell, Chambers, and Rodman, built-up steel guns, strange to say, were first made in Europe.

In the beginning some difficulty was experienced in obtaining the right steel in this country, but at present domestic steelworks are perfectly capable of furnishing steel forgings good enough to be used for the making of any gun, however heavy its calibre may be.

The navy places most of its contracts for high-grade steel with the Bethlehem Iron-works, while the Ordnance Department procures it from the Midvale Steel Company, the Cambria Iron and Steel Works, and in cases of forgings for extra heavy rifles, such as the 12-inch guns, from the Creuzot in France. The following figures will show the progress made in the manufacture of built-up steel guns.

The War Department has at present on hand:

26 3.2-inch steel guns.
1 5-inch rifle.
1 7-inch howitzer.
2 8-inch rifles.
1 10-inch rifle.
1 12-inch rifle.

This is a poor show indeed, considering that all experts agree that built-up steel guns are the best. For this state of affairs the nation may thank the appropriation committees of Congress, who until late have done nothing except to cripple the Ordnance Department in their efforts to provide the proper armaments for an effective defence. The tests of the 8, 10, and 12 inch rifles at Sandy Hook during the last summer have given such eminently good results that Congress should lose no time in furnishing the necessary means for the construction of such guns.

It is gratifying to note that last year's appropriations promise an era of activity in coast defence unequalled since the civil war. The War Department has now placed contracts with citizens of the United States for the steel forgings of 112 field, siege, and sea-coast rifles; the manufacture of 11 8-inch guns; 73 12-inch sea-coast mortars; and of 1 8-inch and 9 15-inch dynamite guns, the last to be manufactured under the supervision of Lieutenant-Colonel Farley. The new Board of Ordnance, which now decides what guns shall be used in the army, consists of General Schofield, General Abbott, Colonel H. W. Closson (Fourth Artillery), and Lieutenant-Colonel Alfred Mordicai (Ordnance Department).

The Navy Department has been more fortunate than the War Department in obtaining appropriations for the construction of built-up steel rifles. As early as 1885 the navy began making built-up steel rifles, of which were ready on the 1st of January, 1891:

4 4-inch steel rifles.
2 5-inch " "
51 6-inch " "
11 8-inch " "
4 10-inch " "
3 15-inch dynamite guns on board the *Vesuvius*.

The process of making a steel rifle is highly interesting, and it takes about seven months to make one heavy gun. The tube, jacket, and hoops out of which a great gun is built up are first cast at the steelworks. Most of the metal is dug out of the mines of Pennsylvania, and special care is taken that the metal is of excellent quality. After the tube has been forged, it is tested before it is received at the army or navy gun factory. The steel used in the tube must have a tensile strength of 80,000 pounds; for the jacket, 85,000 pounds; and for hoops, 100,000 pounds are required.

The 12-inch built-up steel rifle which was finished this year at the army gun factory at Watervliet, and tested at Sandy Hook, under Captain Heath, U.S.A., weighs 52 tons, and is 36¼ feet long. The full powder charge is 440 pounds, and the solid shell turns the scale at 1060 pounds. The initial velocity of this shell, as required by the Ordnance Department, is 1950 feet per second, while its range is nearly 16 miles. At the distance of 6000 yards this gun is able to pierce from 10 to 12 inches of armor. The cost of the gun is about $75,000. Though the plans of a 16-inch gun for coast defence are finished, the efforts made to produce a rifle of this heavy calibre have so far failed to receive approval of Congress. The necessity for such heavy guns has been admitted on all sides. European powers are using them, though it is an open secret that the English 111-ton guns, being faultily constructed, proved a failure. Captain Charles S. Smith, of the Ordnance Department, has designed a 16-inch gun which promises to give fully as good a record as the Krupp gun of equal calibre.

The following breech-loading steel rifles were ordered in 1890 by the United States Ordnance Department:

MOUNTAIN AND FIELD ARTILLERY.

Ordered.		Completed.
1	3-inch mountain steel gun	1
100	3.2-inch light field steel guns	75
1	3.6-inch steel field gun	1
1	3.6-inch steel field mortar	1

SIEGE ARTILLERY.

11	5-inch steel guns	1
11	7-inch steel howitzers	

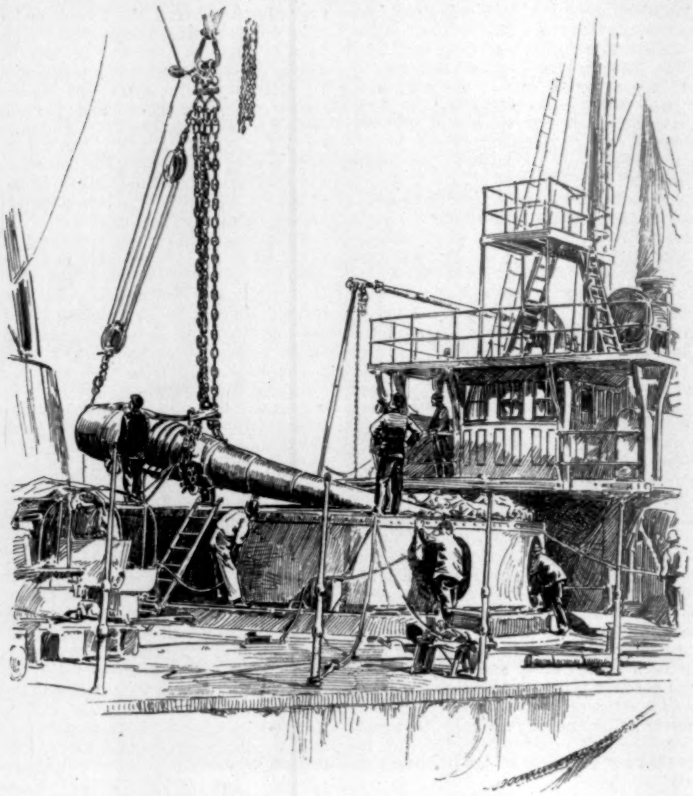
SEA-COAST ARTILLERY.

25	8-inch steel guns	2
24	10-inch steel guns	1
16	12-inch steel guns	1
74	12-inch mortars, cast-iron, steel-hooped	1
1	12-inch steel mortar	1

The pneumatic dynamite or torpedo guns, as they are also styled, are still in a stage of development. As stated before, the United States government has ordered one 8-inch and nine 15-inch guns, which are now under contract with the Pneumatic Dynamite Gun Co., of New York. The inventor of this type of gun is Captain Zalinski, U.S.A., but opinions are divided on the value of the gun in its present state. The time set for the delivery of the guns is much overdue. The delay is caused by the improvements which are being continually made in the construction of the valves regulating air pressure. The recent trial on the *Vesuvius* of guns of this type has clearly shown that the gun is inaccurate and unreliable. In the mean time the Pneumatic Dynamite Gun Co. has made a 15-inch dynamite gun for the Victorian government (Australia), which was tested with guncotton at Shoeburyness, England. This gun, it is said, has given good results. The greatest drawback of the pneumatic gun is its complicated mechanism. The simpler a weapon is, the more efficient it will be in actual warfare. This principle has been so thoroughly evidenced in all the wars of the past that it naturally makes one look with suspicion on the pneumatic dynamite gun. Captain Zalinski, U.S.A., is an able expert, and should he be able to furnish a dynamite gun which is safe, accurate, and simple, he will solve an important problem. It is not my intention to criticise a system which is adhered to by such experts as Lieutenant-Colonel Farley, but, on the other hand, judging from what has been accomplished with this gun up to date, it would be unwise to place too much confidence in it.

The gun of the future, and the gun which may surpass even the built-up steel rifles, seems to be the Brown segmental wire gun, provided its construction can be carried out according to the plans of Lieutenant Whistler, Fourth Artillery, U.S.A. The lieutenant is supervising the making of a 5-inch segmental wire gun at Reading, Pennsylvania. It is claimed that this gun, apart from being cheaper than built-up steel guns, will be able to withstand higher powder pressure, give greater velocity, and consequently have an increased penetrating power over built-up steel rifles of the same calibre. Its construction will not be finished before May next, and the test is looked forward to by army and navy officers with great interest.

SWINGING THE GUN OVER THE TURRET.



LOWERING THE GUN INTO POSITION.

OUR FIRST BATTLE SHIP.

THE commissioning of the old monitor *Miantonomoh*, armed with modern high-power guns, marks an era in our naval progress. Though the initial impulse was given by vessels of the *Chicago* type, they are little more than swift commerce destroyers, whose light unarmored sides could be easily pierced from stem to stern by any ship of the line.

According to the new classification, the *Miantonomoh* will rank as a third-rate battle ship. This is due, however, entirely to lack of speed and endurance, for her great 10-inch rifles and modern compound armor would make her more than a match for the first-rates of the great maritime powers of the world. In the event of hostilities, monitors would serve only as weapons of defence, and would never attempt to carry a war into the enemy's territory. Had the recent misunderstanding with Italy assumed a serious phase, our weakness on the water would have been made painfully evident. At that time the *Miantonomoh* was the only vessel that we could have sent to oppose the monster battle ships of the *Lepanto* class.

The four great guns of the *Miantonomoh* have a history almost as interesting as that of the vessel itself. They were begun at the Washington Navy-yard during the administration of Secretary Whitney. At that time no plant had been established in this country capable of producing large steel forgings for a modern built-up rifle. Those for the first three guns, as well as those for the armor plates, were made in England. The last gun, however, which was recently placed in the forward turret, is entirely of American manufacture from muzzle to breech, and enjoys the distinction of being the first 10-inch modern high power rifle mounted on the deck of a United States vessel.

As each gun was completed, it was sent to the proving-ground at Annapolis to be tested. It was then placed on board a scow and towed by canal to the Brooklyn Navy-yard. Here the 75 ton floating derrick with transporting gear of chain and supplementary rope tackles came alongside. Around the breech straps were secured, and heavy iron hooks grappled the 50,000 pounds of steel. After the guns were mounted on their carriages, the tops of the turrets were armored with deflective steel plates sloping upward to the base of a conning-tower.

The following figures will give an idea of the size of these guns: In the service they are known as 25-ton breech-loading rifles. The length of each is 27 feet, one-half of which projects beyond the turret. The breech block of one of these guns will weigh in the neighborhood of 1000 pounds, the projectile 500, and the service charge of powder 250. The initial velocity will be 2100 feet per second, and the muzzle energy 15,299 foot tons, capable of penetrating 23 inches of armor. The solid steel shot can be hurled a distance of 13 miles, though the effective fighting range will be 7.

After the guns of the *Miantonomoh*, the turrets are perhaps the most interesting part of her anatomy, for in them lies her fighting strength. These are two in number, cylindrical in shape, 24½ feet in diameter, and armored with 11½ inches of steel, weighing 96 tons. Including guns, carriages, and the mechanical apparatus for working them, each turret weighs 200 tons. In battle, powerful engines will revolve this immense weight once a minute.

The big double-turreted monitor has a long and interesting history. She was completed at the close of the civil war, together with the *Amphitrite*, *Monadnock*, and *Terror*. These vessels were built of wood, without overhanging armor shelf at either end or sides, but had 7-inch laminated plates on the broadside, with 12 inches on the turrets. Their batteries consisted of four 15-inch smooth-bore muzzle-loading guns. In speed they never exceeded 10 knots. In 1866 the other three monitors were laid up at different navy-yards, while the *Miantonomoh* was kept in commission, under Captain Beaumont. With Assistant Secretary Fox on board, she made a cruise to Europe, making the passage from St. John's, Newfoundland, to Queenstown in 10 days and 18 hours, thus showing herself a good sea-boat.

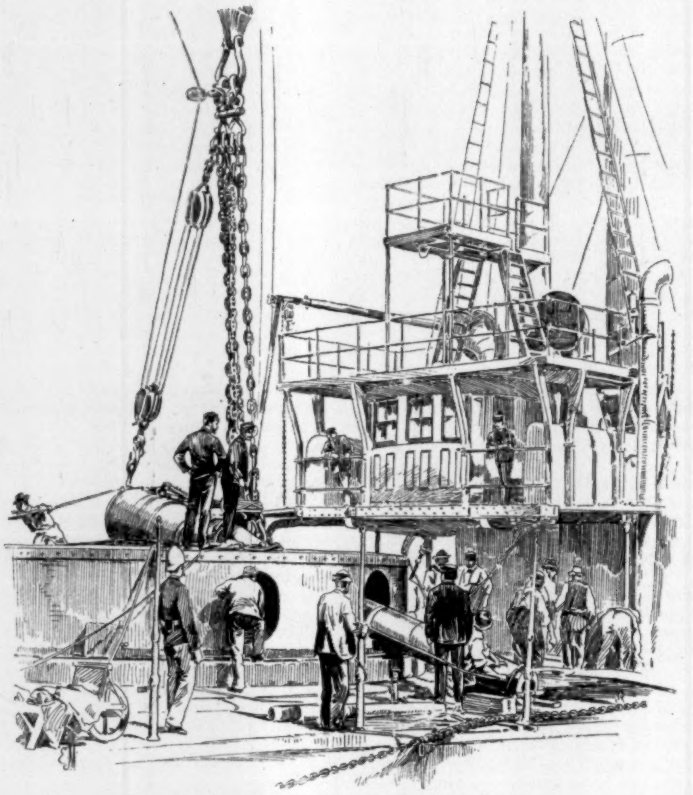
In 1874, during the latter part of Secretary Robeson's administration, it was decided to rebuild these vessels to meet the requirements of modern warfare. Congress refused, however, to appropriate any money except for repairs, and it was therefore under these acts that the *Miantonomoh* underwent the successive changes that have made her practically a new vessel. John Roach, becoming tired of the apparent apathy of the national government, sent in a large bill for wharfage. His action seemed to have aroused Secretary Chandler, for in the fall of 1882 the *Miantonomoh* was again put in commission, under Commander Higginson. Neither her guns nor turrets were completed at this time, but weights were placed in cribs to give the normal displacement. In a few months she was again laid up, this time at the League Island Navy-yard. Finally, during Secretary Whitney's administration, the old vessel was brought on to the Brooklyn Navy-yard, where the work of reconstruction began in earnest.

The present *Miantonomoh* is technically known as a low freeboard, twin-screw, double-turreted ironclad of the monitor type. Her principal dimensions are as follows: Length over all, 262 feet; breadth of beam, 55 feet 2 inches; depth of hold, 14 feet; mean draught, 14 feet; freeboard (ready for sea), 2 feet 1 inch. Complement, 200 men; speed, 10 knots; displacement, 3824 tons.

The hull is of iron throughout, and divided into 87 water-tight compartments. For a length of 223 feet, from the forward collision bulkhead to within 11 feet of the stern-post, there is a double bottom. The space enclosed by this double bottom is subdivided into 46 compartments by transverse water-tight floors and the vertical keel. The machinery space is in the inner bottom amidships, and extends upward to the armor deck. This is also divided into water-tight compartments, 14 in number, and contains the engine and boiler rooms and coal-bunkers.

The power will be furnished by engines of a direct-acting compound type, with cylinders of 32 and 40 inches in diameter, and a stroke of 42 inches. Four return-fire tubular boilers will furnish steam at a working pressure of 80 pounds to the square inch. These will be placed forward of the engines, two on each side of the vessel, with the fire-room between. In addition to the four 10-inch guns already described, the *Miantonomoh* will have a secondary battery of four 6-pounder rapid-fire Hotchkiss-guns, and in the military tops two revolving cannon and Gatling-guns.

W. NEPHEW KING, JUN.



ADJUSTING THE GUN ON THE CARRIAGE.

PLACING ONE OF THE TEN-INCH GUNS IN THE TURRET OF THE "MIANTONOMOH."

THE INDEPENDENT THEATRE IN BOSTON.

BY J. H. WILSON.

LAST season was presented in Chickering Hall, Boston, a new play, *Margaret Fleming*, written by the well-known playwright and actor James A. Herne. Concerning the piece much has since been written by those who saw in it the elements which alone could lift the modern drama out of the ruts of conventionalism, and place it on a plane where it could hold its own with literature and art. The friends of this especial reform believed that the stage was on the eve of a great change, and that the transition from the drama of plot and style to the drama of character and purpose was already apparent. The direct result, therefore, of the production of *Margaret Fleming* has been the formation of a permanent organization to be known as the "First Independent Theatre Association," the membership being composed of representatives from the leading professions. The prime object of the society is the promotion of dramatic art in America, and the first matter considered was the advisability of building and maintaining a theatre where plays could be produced on their own merit without the many inconveniences and conditions which attach to almost every play now put upon the boards. As wealth and enterprise are prominent characteristics of the association, an affirmative conclusion was quickly reached. A ways and means committee was appointed.

The establishment of an independent or free theatre, while new to this country, has been tried at several places abroad; and for the proof of the probable success of the present enterprise its promoters point to the Freie Buehne at Berlin and the Théâtre Libre at Paris, both of which are now recognized factors in the elevation of the stage in their respective countries. London also has an independent theatre, but as yet it is too early to look for any results, as the first play was produced only last March. The claim is made by the friends of the independent theatre that under existing conditions the American stage is decidedly on the decline, and has already lost the little individuality it possessed; that the acceptance or rejection of plays is based not so much on the embodiment of an idea, an honest lesson to teach, or the possession of real artistic merit, as upon the immediate financial gain that will accrue to managers; that the conventional play has held a supposed pre-eminent position so long that playwrights dare not diverge from the beaten track.

In the establishment of this free theatre plays will be immediately removed from the disastrous influence of a box-office, and "Truth for Art's Sake," which is the motto of the association, will be everywhere apparent. All works will be produced without fear or favor, and the so-called dramatist will stand no better chance of having his play accepted than will his obscure neighbor, since everything will be given anonymously for one week. A reading committee will have entire charge of the selection of plays, and a favorable verdict having been passed by a

majority, the plays will be turned over to the theatrical director, who will be responsible for their proper production. It is believed that the plan, successfully carried out, will result in the birth of a genuine and truthful American drama, possessing an individuality as truly its own as is the case with the French and German dramatic schools.

The theatre which the association proposes to build was designed by Messrs. Cram & Wentworth, of Boston. In construction it will be as radically different from other playhouses as possible, and, wherever practicable, the architects have tried to follow out the designs of the famous private theatres attached to the French palaces in the time of Louis XIV., especially those at Fontainebleau and Versailles, which were models of luxury and ease. The seating capacity will be only 600. The most noticeable feature of the interior will be a row of fourteen private boxes in the space usually known as the orchestra circle. They will accommodate six people each, and will be rented by the season to the subscribers, who will have the privilege of occupying them two nights a week. A foyer, 50 by 20 feet, where the audience can congregate between the acts, will be situated in the front of the second story. There will be but one balcony, and the orchestra will be hidden under the stage. The interior will be as handsome and delicate as any boudoir, the prevailing colors being ivory white and gold.

The curtain, as well as all the draperies and upholstery, will be of damask of the same colors, and all fancy metalwork will be dispensed with. As far as possible all stage appurtenances will be built rather than suggested, thus doing away with as much sham as possible. Fifty feet wide and 30 deep will be the stage dimensions.

The curtain will not roll up, but will be drawn aside and draped. Yellow brick and white terra-cotta will be used for the exterior. First nights will always be Tuesdays, and special efforts will be made to have the managers of other theatres present on these occasions. Only five performances a week will be given—three to the general public, and two for the subscribers. Contrary to current rumor, the theatre will not be confined exclusively to the production of American plays. The season will last thirty weeks; in which time, it is hoped, a dozen plays will have had a hearing. A stock company will build the theatre, which will have a location near Copley Square, and the co-operative principle will be extended to the plays, the association retaining an interest in the pieces it produces. The cost of the edifice will be in the neighborhood of $100,000.

A word as to how *Margaret Fleming* came to be produced. It was written some two years ago, but no attempt was made at that time to stage it. To W. D. Howells and a few other literary people the play was read, and they were so favorably impressed with it that they urged its production in some Boston theatre. In a letter written to Mr. Herne, Mr. Howells said: "It [*Margaret Fleming*] has qualities which I believe will make a stronger appeal than those of any other American play. While it is wholly and perfectly true in our conditions, it has the same searching moral vitality as Ibsen's best work, and it is most powerfully dramatic. Your fidelity to the ideal of truth, the only ideal worth having, is witnessed in every part of it, and it will be recognized by every one who can feel and think as a piece of nature and a great work of art."

Owing to the fact that no open date could be had at any of the regular theatres, and being desirous that the public might have an opportunity of judging of the merits of his play, Mr. Herne was obliged to utilize Chickering Hall; but, from an artistic stand-point, the piece suffered nothing by this arrangement. On the first night, which usually augurs much for the success or failure of a new play, there was a small attendance; and such, too, was the rule at every one of the two weeks' performances. But the audience was comprised of that class of people who could be depended upon for carrying to a successful issue any honest reformation. They were not of the merely social set; they belonged to the literary, art, dramatic, and journalistic world. The play proved to be very pathetic—perhaps gloomy; it dealt with a subject common enough in every-day life, but rather a new one, and a bold one too, for the stage to handle. During the progress of the play there were times when climaxes were reached such as would have ordinarily provoked thundering applause. But not so here; the audience was spellbound; it was as though an electric shock had paralyzed the spectators. A reaction, however, came at the conclusion of each act.

Of the many people, all well known in their respective professions, who have more or less identified themselves with the independent theatre movement may be mentioned W. D. Howells, Mrs. Louise Chandler Moulton, T. B. Aldrich, Arlo Bates, and Edwin D. Mead; all literary lights; Miss Mary Shaw and Mr. and Mrs. James A. Herne, exponents of stage art; Miss Mildred Aldrich, Sylvester Baxter, and W. A. Brownell, of the journalistic world; and B. O. Flower, editor of the *Arena*. All, with one exception, were present at the first performance. The development and subsequent outcome of the movement will be watched with no little interest by other than the dramatic world.

The play is now running in Boston at Chickering Hall. But the movement for the new theatre is in abeyance.

ON THE COSTUME OF HAMLET.

BY E. HAMILTON BELL.

At a moment when the death of Mr. Lawrence Barrett and the retirement (only temporary, it is to be hoped) of Mr. Edwin Booth has left our stage with no notable representative of Hamlet, Prince of Denmark, it may be interesting to pass in brief review some of the suits of sable in which one royal Dane after another has "gone slow and stately by" from the first day that the "ghost walked" until now.

In doing this we must bear in mind that there is no correct costume for the part, and that therefore while each of these representatives has been right, they have all likewise been wrong. If, as a great critic has said, Hamlet is each one of us, we ought not to quarrel if a *fin de siècle* player chose to enact him in a full-dress suit of modern cut, with a satin-lined Inverness for the Prince's "inky cloak."

Hardly any play of Shakespeare's is so full of anachronisms as *Hamlet*; so that even if we could date the action with any precision, it would be absurd to attempt any great historical accuracy in presenting it on the stage. Still, before seeing how the Prince of Denmark has been attired from time to time, let us try from the few data at our command to picture him in his habit as he lived. Though there is no reason for believing—

THOMAS BETTERTON.

KING CANUTE.

nor for disbelieving, if it comes to that—that Shakespeare was acquainted with the *Historia Danica* of Saxo Grammaticus (*circa* A.D. 1180–1208), it is pretty certain that he must have meant to present the same story as that chronicler, because in the tragedy England is spoken of as "his faithful tributary," and as smarting from the Danish sword.

Now the Danish power in Europe was at its zenith in the tenth and early part of the eleventh century, Canute, who reigned from 1017 to 1035 A.D., being the first and almost the only king who united the crowns of Denmark and England on one head. We know that never since that date was England tributary to any other country. Consequently the latest period at which it would be possible to fix the date of the play is the eleventh century. We know but little of the Danes at this epoch, but that little is enough for our present purpose.

In form their costumes did not differ in any important particular from those of the nations by whom they were surrounded, and upon whom they preyed—Franks and Anglo-Saxons; but they seem to have indulged a singularity of taste in the matter of color. From various passages in chronicle and ballad we learn that black was their customary wear, and it so remains to the present day among the Scandinavian peasantry. Caradoc of Llancarvan speaks of them constantly as the "black Danes," and the chronicles allude to the "black army" whose devastations form so constant a theme of their records. In the Danish ballad of "Child Dyring" the hero rides to a wedding feast clad in "black sendal."

M. Planché suggests for the Danes a common origin with those other Scythians whom Herodotus mentions as wearing only black, and to whom he therefore gives the name of Melanchlænians.

Shakespeare either was not aware of or chose to ignore this fact, as he did another which touches the matter of Hamlet's "customary suit of solemn black" more nearly. Adam of Bremen, who lived about 1127 A.D., informs us that the Danes never mourned for the death of even their nearest and dearest relations; so that, to be historically correct, Hamlet should wear the royal scarlet of the reigning house of Denmark. One ingenious commentator, who had achieved this latter piece of information without the former, suggests that this is the cause of the Queen's remonstrance with her son in the first act: "Good Hamlet, cast thy nighted color off." By the time they had come to reign in England silk was undoubtedly a material with which the Danes were familiar. The sendal alluded to above was certainly a silken fabric. Velvet, however, was not known in Europe before the thirteenth century, and even then may not have been the material which now goes by that name. Furs, of course, were used by a nation who inhabited such a severe climate.

JOHN PHILIP KEMBLE.

DAVID GARRICK.

The first authentic pictorial representation of a royal Dane with which I am acquainted is a portrait of King Canute in the register of Hyde Abbey, which was written in his reign. In this picture, besides his crown, which may be merely symbolical, though kings at that date most probably wore their crowns every day, Canute wears a tunic, a mantle tied with jewelled cords on the shoulder, breeches and hose bound about his shins, and held by jewelled garters. His tunic is embroidered at the neck and wrists, to which such adornment was not always confined. This same monarch gave to the Abbey of Croyland a silken vestment embroidered with golden eagles; and when his tomb in Winchester Cathedral was opened, about a century ago, bands of gold and silver which had ornamented his apparel were found within.

These and numerous other instances would give license to the representative of the "sweet Prince" for almost any degree of magnificence, always provided that he eschewed velvet, of which, however, his "inky cloak" is almost always made nowadays.

The date of the first production of *Hamlet* is uncertain, but it must have been about 1600, as the play was entered in the Stationers' Register in 1602, and the first quarto bears imprint 1603.

There is no such uncertainty concerning his first representative, who was, without any doubt, Richard Burbage (b. 1566; d. 1619), and whose physical appearance is said to have been the reason for "our son" being "fat and scant of breath"—a phrase which is repeated in an elegy on the death of the actor:

> "No more young Hamlet, though but scant of breath,
> Shall cry 'Revenge' for his dear father's death."

His costume was assuredly that of his own day, the stage of that time being above such minor considerations as accuracy of costume.

A portrait of him in the Dulwich Gallery shows him bearded, as I have no doubt that Hamlet was in the eyes of his creator's generation; and I have selected the costume of a noble of the court of good Queen Bess, from the celebrated picture of her progress to Blackfriars in 1600. His successor was Joseph Taylor, who also was instructed by Shakespeare, and who played the part until the theatres were closed by the Puritans in 1642. When they were reopened, after the Restoration, Thomas Betterton (b. 1635; d. 1710) was coached in the traditions of the part by Sir William Davenant, who had seen Taylor play it. Betterton is said to have appeared as Hamlet when he was twenty-six years old, and Pepys mentions having seen him in the character in 1661, in which year he would have been that age. He continued to play it for fifty years, and won the plaudits of two generations of wits and scholars in it.

At first he wore the dress of a courtier of the Merry Monarch, and afterward played it in a cocked hat, powdered wig, and streaming shoulder-knots; so he, like Burbage, would seem to have followed the constantly changing fashions of his long life. In the year in which he first played Hamlet, King Charles gave Betterton his own coronation suit to play Prince Alvaro in *Love and Honor*; so I have habited the Prince of Denmark in a court dress of the year 1660 without fear of anachronism.

A portrait of Betterton as Hamlet in the Garrick Club in London shows him in a very clerical costume, with a formal neck-cloth, but this must have been toward the end of his career. Betterton is dressed in a black velvet court suit of the period, the traditional stocking down, a full muslin neck-cloth, and a full-bottomed powdered wig with long curls.

RICHARD BURBAGE.

EDMUND KEAN.

JUNIUS BRUTUS BOOTH.

The next great Hamlet was David Garrick (b. 1716; d. 1779). An eye-witness describes his appearance thus: "Hamlet, who is in mourning, appears here with thick loosened hair, some of it hanging over one shoulder, he having already begun to play the madman; one of his black stockings is half-way down his leg, showing the white under-stocking, and a noose of red garter hangs down the middle of the calf." The mourning appears from his portrait to be a full court suit of black velvet cut in the style of the middle of the eighteenth century.

John Philip Kemble (b. 1757; d. 1823), who appeared in the character for the first time in 1783, is thus described by his biographer Boaden: "He wore a modern court dress of rich black velvet, a star on the breast, the garter and pendent ribbon of an order, mourning sword and buckles, with deep ruffles; the hair was in powder, which in the scenes of feigned distraction flowed dishevelled in front and over his shoulders." And again, "He wore an elephant suspended by a blue ribbon, and a modern star."

Boaden laments that Kemble should have committed the anachronism of a departure from the Vandyck costume "of black satin and bugles," to which "we have for so many years been accustomed," on the ground, apparently, that the ghost's armor is not out of keeping with the period of Charles I., as it is with that of George III.

The celebrated portrait of him by Sir Thomas Lawrence exhibits an entirely different costume, apparently of black satin, in which he wears his own hair and no order of the Garter, though the elephant on its blue ribbon is conspicuous, and the star no doubt is there lurking among the folds of the "inky cloak." A pair of obvious patent-leather pumps are the only relic of the court dress mentioned by Boaden. His brother Stephen, the celebrated Falstaff, who was so enormously stout that he could play the "fat knight" without any padding, appears to have thought the precedent of Burbage's size a good reason for following his footsteps in the part of Hamlet, which he played frequently in an old-fashioned black coat, breeches, and vest, shoes with buckles, and a large flowing auburn periwig, and would seem to have been as unromantic in his playing as in his appearance.

Edmund Kean (b. 1787; d. 1833) and his great rival Junius Brutus Booth (b. 1790; d. 1852) dressed the melancholy Dane in a combination of Elizabethan and Vandyck styles, which might perhaps have satisfied Mr. Boaden. The deep lace collar and cuffs, together with the star on the short cloak, date from the latter period, while the doublet and trunk hose and fashion of the hair, shorter than Charles I. was accustomed to wear it, suggest a date some twoscore years earlier.

Hitherto it will be observed that however anachronistic may have been his "customary suit of solemn black," the Prince has been "suited at all points like a man." We now come to a period of petticoat government, when, as in the first instance we give, the guise, or rather disguise, is such that the sex of the representative becomes almost a matter of doubt. Perhaps it was this fact which tempted so many actresses to essay the part, as before this time Mrs. Siddons, and she but once, I believe, is the almost only recorded female Hamlet, while since their name is legion.

Charles Kean (b. 1811; d. 1868), who is celebrated for the excessive and almost finical pains he took to be archæologically correct in his productions, was, it would seem, baffled by the difficulties of Hamlet, and costumed him as ridiculously as his predecessors had done, though, as observed above, "with a difference." He gave up wearing his stocking "down gyved to his ankle" in the mad scenes, which was something to be grateful for, but he retained the order and star on the cloak. It is true that the Order of the Elephant was founded by Christian I., King of Denmark, and the star belonged to an order invented by Charles I. of England, but Hamlet antedated these monarchs by a few centuries.

WILLIAM CHARLES MACREADY.

EDWIN FORREST.

Macready (b. 1793; d. 1873) and Forrest (b. 1806; d. 1872) renewed the rivalries of Kean and Booth, and, like them, in Hamlet; indeed, the first outbreak of the hostilities which terminated only in bloodshed during the Astor Place riot on May 10, 1849, occurred during a performance of Hamlet by Macready in Edinburgh about three years before that date. Forrest, who was in the audience, chose to hiss what he scornfully designated as the *pas de mouchoir ;* this was a piece of business used by Macready as he said, "They are coming to the play; I must be idle." To give the impression that Hamlet's intellect was unsettled, he danced across the stage, waving a white handkerchief over his head.

The audience were on Macready's side, and without knowing who it was that hissed, he "bowed derisively and contemptuously to the place where he sat, and danced and waved the more."

Both of these were petticoated Hamlets, and Forrest seems at one period of his career to have worn a dress which had almost as much white as black in it, and which must have made him look very like a magpie. Fechter (b. 1824; d. 1879), the flaxen-wigged Hamlet of the last generation of play-goers, also wore a skirt, and also "cast" his "nighted color off" to some extent, wearing, instead of an "inky cloak," one of gray with a black velvet hood.

FECHTER.

CHARLES KEAN.

He is the first Hamlet, if we except Burbage (concerning whom we have no certain records), who wore a beard and mustache; these, like his wig, were blond.

The veritable wig is now in the collection of The Players, and is decidedly of a redder shade than what is usually known as "flaxen," by which epithet it is designated both by George Henry Lewes in *Actors and the Art of Acting*, and by Miss Kate Field in her life of the great romantic actor. The modern Hamlets are Mr. Edwin Booth and Mr. Henry Irving, both of whom have more nearly approached to the possibilities of the authentic costume (always supposing there is such a thing) than any others who have achieved fame in the character, Mr. Booth carrying his attempt into matters of the minutest detail. He used to wear, for instance, a dress entirely made of soft woollen stuff, the monotony of the sombre color being relieved with purple in bands on the sleeves, the lining of the cloak, and the hose; at one time he substituted blue for this color. He cross-gartered his legs, and wore a short mantle fastened on one shoulder, presenting a very striking resemblance to the portrait of King Canute, without sacrifice of either grace or dignity. This, it seems to me, is the ideal way to dress the melancholy Prince; it is sufficiently possible and accurate to satisfy the student of such matters; sufficiently strange to produce upon the less-cultivated mind an effect of "once upon a time," which is, after all, the real date of the play; while at the same time it is graceful and becoming, and eminently helpful to the actor in striking the key-note of the character on his first appearance.

EDWIN BOOTH.

LAWRENCE BARRETT.

More recently Mr. Booth has worn a soft rich silk tunic and a cloak of plush, which is certainly a grave anachronism, but possibly to be accounted for by the desire to give variety to a costume entirely of black, which color he now affects to the exclusion of any other.

Lawrence Barrett's dress when he first attempted the part of Hamlet was a copy of Mr. Booth's—black serge relieved with blue. Subsequently he wore one of the strangest suits of solemn black that ever the Dane was indued withal. It was founded upon a dress worn by Leotard, the trapeze performer, and consisted of a very close-fitting "shape," as it is called in the theatrical profession, of black satin, profusely adorned with bead-work, and fringed with the same. This, with a cloak thrown over one shoulder, and a hat crowned with "a forest of feathers," made of Mr. Barrett a gallant figure indeed, but "more an [Italian lover] than a Dane."

HENRY IRVING.

His last Hamlet dress was of black embroidered silk crêpe, with elaborate trimming of bead-work, and generally of a fanciful no period in particular, but undeniably princely and picturesque.

When Mr. Irving first essayed the part he was severely criticised for the "unfortunate choice of a costume of a strangely docked and confined kind," which prevented his presenting "a picturesque appearance on the scene." I do not remember any very marked difference from his present costume as here represented, except that he used to wear a voluminous mantle of cut brocaded velvet in lieu of the fur-lined cloak in which he now enwraps himself from the nipping and eager air of the platform at Elsinore.

MOUNET-SULLY.

His doublet is of heavy black silk trimmed with velvet ("but that's not much"), and his hose are of silk. Otherwise there is little amiss with his attire, save and excepting a most Mephistophelian hat and cock's feathers.

I have never been able to understand why when the Comédie Française presented *Hamlet*, some five years ago, the powers that decide such matters should have pitched upon the period of Francis the First for the mounting of the play.

Be that as it may, there is no doubt but that M. Mounet-Sully looked a prince *fait à peindre*.

CHINESE COOLIES LOADING A STEAMER AT HAVANA.—Drawn by Frederic Remington.—[See Page 881.]

E. D. WARFIELD, THE NEW PRESIDENT OF LAFAYETTE COLLEGE.

A NEW COLLEGE PRESIDENT.

ETHELBERT D. WARFIELD, LL.D., who on Tuesday, October 20th, was installed as President of Lafayette College, is a conspicuous example of the promotion of young men to positions of high trust and responsibility. He was born at Lexington, Kentucky, March 16, 1861, and consequently is just thirty years of age. He comes, however, of a family noted for early maturity. His great-grandfather, Senator John Breckinridge, was three times elected to the Virginia House of Delegates before he attained his majority; his grandfather, Rev. Robert J. Breckinridge, D.D., LL.D., early attained eminence; his uncle, Inspector-General Joseph C. Breckinridge, is the youngest general officer in the United States army; and his only brother, Professor Benjamin B. Warfield, D.D., of Princeton, had attained distinction and received his doctorate from Princeton before he was thirty.

President Warfield was educated at Princeton College, Columbia College Law School, and Wadham College, Oxford. He was admitted to the bar in June, 1884, and continued in the practice of the law until September, 1888. Before leaving college he began to publish occasional literary articles, and in 1887 published a monograph on "The Kentucky Resolutions of 1798," which attracted considerable notice, and largely led to his call to the Presidency and Professorship of History at Miami University, at Oxford, Ohio. He filled this post with success, and in March of the present year was called to Lafayette. Having accepted this call, he took active charge in September, and his formal installation took place on Founders' day. The act of installation was performed in Pardee Hall, by the aged Ario Pardee, the second founder of the college, a chorus of men singing the installation hymn of the ages, the noble "Veni, Creator Spiritus," of Gregory the Great, and the prayer being made by the Moderator of the Synod of Pennsylvania. A great throng of visitors, including the Synod in a body and many distinguished guests, attended the ceremony, and the dinner which followed in the gymnasium. After dinner, speeches were made by the venerable Dr. McCosh, of Princeton; by President Low, of Columbia, and by representatives of a large number of sister colleges, of the judiciary, the church, the army, the Alumni Association, etc. Not for many years has such enthusiasm been seen on the lovely hill-top where the college stands, between the Lehigh and the Delaware, and great hopes are entertained of a successful administration.

N. F.

A GREAT LOSS TO NEW YORK.

IT appears to be almost impossible for any man who has accumulated a vast store of riches to make a will bequeathing his wealth in terms so exact and explicit that after his death there will be no chance that some one may attempt to defeat the purposes of the testator in one way or another. Sometimes it is charged that the testator was incapable of making a will by reason of mental unsoundness; again, undue influence is charged to have been exerted on him to the injury of his natural heirs; and then, again—but not so frequently—contestants urge that the testator attempted by his will to do something not contemplated in and contrary to the law. This latter contention was the one urged against the will of the late Samuel J. Tilden, who died in 1886, leaving a large fortune. By his will he gave to his heirs at law and to certain friends something like a million dollars, which was probably about one-sixth of his estate. The residue of the estate was bequeathed in trust to his executors, for the purpose of creating the "Tilden Trust." This "Tilden Trust," it was explained by the executors, who were close personal friends of Governor Tilden, was to be used in establishing a free library in the heart of New York city. In the will, however, Governor Tilden appears to have given what the Court of Appeals has decided was too much discretionary power to his executors, for they were to decide how much, if any, of his residuary estate it was expedient or wise to give to the "Tilden Trust," and to do with the rest what they considered was "most widely and substantially beneficial to the interests of mankind."

The heirs of Governor Tilden when he died were a sister, who has since died, and the six children of his brother. His brother's children contested the legality of the clauses in the will which requested the executors to establish the "Tilden Trust" and give his residuary estate to it, or, in the event that they did not consider this wise, to dispose of that residue or any part of it as above indicated. The fight over the will has been a purely lawyers' battle, and has been watched with great interest by all of the profession. It has been said that the late Charles O'Conor advised Mr. Tilden that the clause mentioned would invite contest, but that Mr. O'Conor died before he had indicated wherein he thought it faulty. The contest has proved that very good lawyers thought the will entirely valid, for in the three hearings eleven judges have heard the arguments, and five out of these thought it all right. In the Court of Appeals, in the case just ended, three out of the seven judges voted in favor of the will. All this goes to prove that it is most difficult for a man to know, when he is preparing his affairs for his final exit, whether, with all his care, his arrangements will be carried out after he has gone. Governor Tilden was a shrewd man of affairs, and also a lawyer of long experience and great skill, and yet his most cherished scheme for the benefit of New York city has been suffered to go amiss on account of a legal quibble, which was not the outgrowth of any direct statutory law, but merely the result of a lot of precedents which judges have made in their interpretation of the law. There was no great principle involved, and the quibble was so doubtful that three out of seven judges of New York's highest court were of opinion that in the face of the very evident and manifest meaning and desire of the testator the point urged by the contestants was trivial, and should not have prevailed. The majority, however, decided that Governor Tilden's will as to the "Tilden Trust" was merely a suggestion to his executors, which they could follow or disregard, whichever they saw fit, and that if the will were maintained neither the "Tilden Trust" nor any one else could go into court and demand that the executors carry out the provisions of the will. Upon this ground has the will fallen, and the residue of the estate, now amounting to some six or seven million dollars, goes to the heirs at law.

Before the contest of the will had gone very far, the Legislature of New York had incorporated the "Tilden Trust," and the executors had transferred to that corporation all of the property left by Governor Tilden and not otherwise disposed of in his will. This prompt action on the part of the executors shows that no wrong would have been done had the will been allowed to stand. That this had been done was well known to the court, but it cut no figure whatever in the chain of reasoning by which the majority of the court reached a conclusion. Had the executors been permitted to go on, New York would have had in a few years a magnificent free library, which, with the ample means at the command of the trustees, could have been kept up to the times, and have been what such an institution should be. New York is worse off in respect to free libraries than any other large city in America. There are, it is true, many large and valuable collections of books in the metropolis, and many of these are open free to students under certain conditions, but none of them is worthy to be called a comprehensive free library. This one is so hedged about by regulations that it is as difficult of approach as the Court of St. James's when a great official function is in progress; another one has its catalogue so wonderfully compiled that its mysteries are as difficult to master as those of Sanscrit; another is filled with old books, usually out of date and no longer authoritative, which, however, when any of them would be useful, are nearly always in process of removal to another alcove; another is open only during those hours of the day when men are busy at other things, and so on and so on. Boston, Philadelphia, Chicago, all of the great American cities, in fact, have great public libraries, which are free to all who care to use them. In all the semi-public libraries of New York there may be as many books as there are in those of any other American town, but in New York they are not accessible. To remedy this was Governor Tilden's desire. That the courts have said that Governor Tilden's intentions in this regard cannot be carried out is a public calamity, and one of the most serious losses which New York city has ever experienced.

Since the decision of the case, it has been announced that the executors some time ago, for a consideration of $975,000, purchased from Mrs. William A. Hazard, the grandniece of Governor Tilden, her interest in the estate. As she was the only surviving heir of Mr. Tilden's sister, Mrs. Pelton, her interest in the estate is one-half of the whole. In this way the executors will have two millions or more to apply to the "Tilden Trust," and there will be a Tilden Library, after all, in case Mrs. Hazard does not change her mind, and ask the courts to set aside the contract made between her and her trustees. Should she do this, the courts would probably grant her request, as suspicion always attaches to any contract between a ward and a trustee, and the law looks upon such an arrangement with especial disfavor when, as in this case, the ward gives the trustee more value than is received in consideration. But should the arrangement hold, the library very naturally cannot be anything like it would have been had the trustees had, as Mr. Tilden intended, some five or six million dollars to start out with. Whenever the good intentions of a man miscarry after he is dead, the wisdom of Peter Cooper, who administered on his own estate during his own lifetime, always appears to striking advantage. He had the satisfaction of doing his own good work, and seeing that it was well done.

JNO. GILMER SPEED.

AMATEUR · SPORT.

BIRDS OF A FEATHER.

[Lord Hawke's team of cricketers were beaten at Manheim by the Philadelphians by eight wickets, whereat the Philadelphia *Ledger* cockadoodles considerably. The Britishers, however, won the return match somewhat easily.]

The Yankee Eagle well might squeal and squawk
At having licked the British bird (Lord) Hawke.
But when that Hawke his brood had "pulled together"
That Eagle found it yet might "moult a feather."
Go it, ye friendly fighting fowls! But know
'Tis only "Roosters" who o'er conquest *crow!*

—*London Punch.*

THERE ARE SO MANY MATTERS more important and much more interesting demanding space in this department that I have not before had the opportunity of acknowledging my indebtedness to the Kennel editor of the Philadelphia *Press* for his characteristically courteous comment on my criticisms of the English cricketers a few weeks ago. To have the product of one's lucubrations dubbed "ridiculous" and "full of statements for which there was no foundation" by so eminent an authority on misstatements as my distinguished Quaker City confrère is rather crushing to so recent an aspirant in this especial field as myself. To monopolize all "ridiculous" publications is hardly fair of the Philadelphia Kennel editor, but then some lucky fellows are born to greatness, while others are destined to plod their insignificant way along the uneventful paths of common-sense. That my penance may be the more complete, and the discernment of my Philadelphia critic the better appreciated, I quote the opening paragraph of my "ridiculous" criticism in the issue of September 26th:

"Last week, in giving the names of the English eleven, I said it was by no means a team of the first class; this week I add that it hardly ranks second class. It is only fair to say, however, that Lord Hawke's efforts to bring over none but simon-pure amateurs have resulted in numerous declinations that have been very disappointing to him."

IT IS TO BE REGRETTED that any one should have come upon the scene to share the lustre of the search-light turned on my "ridiculous" scribbling by our Quaker City censor, and yet, on September 30th, the New York *World* was envious enough to climb to the seat of judgment, heretofore occupied solely by the Kennel editor of the Philadelphia *Press*, and seek the crown already become too small for the one head it rakishly adorned. It was indeed most unkind of the *World* to add its *brutum fulmen* when the Kennel editor had labored so long and zealously for a little thunder-bolt he could call his very own, and which was not loaded. The copartnership did not last long, however, for a few days later in the London correspondence of the *World* was the following, which I quote literally:

"NO INTEREST TAKEN IN THE TEAM.

"American cricketers will hardly feel flattered to learn that Britishers take little interest in their contests with Lord Hawke's team.

"Though Lord Hawke's players are eminently respectable from the point of view of the British peerage, they are not regarded as in any degree representative of British sport. They would stand little chance here against second-class teams. Many of Lord Hawke's players were good men some years ago, but most of them belong to the army of 'have beens.'

"When Lord Hawke first mapped out his American tour, he intended to take some crack players with him, but one by one they excused themselves, until not one single bowler of even modern form was in the pack. Lord Throwley is only a second-rate player, while Lord Hawke himself has been retrograding ever since he resigned the captaincy of the Yorkshire Club."

TO SHOW FURTHER just how utterly "ridiculous" were my criticisms, we will have a look over the Englishmen. I shall not attempt to follow them outside of their match in Philadelphia. They put up their best game on the Manheim Grounds, and, as a matter of fact, there is no cricket in this country outside of Philadelphia worth following. In the matches of their tour they have shown up well on account of the weakness of their opponents. Lord Hawke's English average for 24 innings is 13.41. Leaving out his lucky innings of 126 *vs.* Somerset, his total would be 156 for 23 completed innings—an average of 6.74 per inning. The decadence of Yorkshire cricket has been a fruitful topic among the English cricket critics. It is composed almost entirely of professionals, and has declined from a leading position among first-class counties to the last but one on the list. So much for the captaincy of Lord Hawke. His lordship stands 84th among the first-class batsmen of England, a position that scarcely entitles him to be considered a representative man. H. T. Hewett is the best bat of the team, captain of Somersetshire, 33d among English batsmen, with an average of 19.76, and a good fielder. K. J. Key has gone off very much in his batting since he was here last; his English average is 14.47, and he stands 71st on the batting list. He batted like a novice in the first match in Philadelphia against the slow bowling of Walter Scott and H. I. Brown, and even in the second inning of the second match (the best he played) he gave an easy catch almost before he had scored. In the field he is a duffer. Whatever he may have been years ago, his retention on the Surrey County eleven can be attributed only to the dislike of Englishmen to disturb ancient landmarks. The English papers have discussed the advisability of shunting Key in favor of better players time and again.

C. W. WRIGHT stands 93d on the list of English batsmen, with an average of 12.50. He is on the team for his wicket-keeping, probably, which is very fair when he becomes used to the grounds. Woods is the one really representative man on the team, being the only one who would be chosen to play on a representative Gentlemen of England team. C. W. Brown is a pretty bat, but he has done very little in first-class English matches. He was tried for Gloucestershire, and once made 27 not out. He has not been chosen to play for his county during the past two years, consequently he is not placed among first-class players. Thorley showed poor form in Philadelphia, batting in a very fluky style. He has not played in first-class matches for several seasons. Hornsby, Ricketts, McAlpine, Hillyard, and Mills are not worth discussing, the tail end of the team being wretchedly weak in batting.

AND NOW THE LITTLE TEAPOT TEMPEST which the Kennel editor, in an effort to enliven his columns, put on to boil for the delectation of the defeated Quaker City cricketers has spent its fury. I said the English team "hardly ranks second class," and I challenge any one to confute my assertion. I made no reflections on Lord Hawke's reasons, etc., for coming over. I said Englishmen entertain a poor opinion of American cricket, and my statement is borne out by the contemptuous expressions of the English papers in referring to American cricketers. I shall be inclined to agree with the Englishmen hereafter, since Philadelphia permitted them to win the second match. There was no excuse for that defeat. The team that represented the Quaker City in the second match was much weaker than that in the first. Crawford Coates and R. D. Brown, who scored so finely in the first match, were absent, and so was Brockie, the captain. This last loss was the greatest, for a good captain is not easy to replace, and G. S. Patterson is not so good a skipper as Brockie. It may be that the absence of Brockie destroyed the confidence of the Philadelphians, but, at any rate, they played like duffers against the very bowling they had knocked all over the field in the first match. The Englishmen gave occasional exhibitions of good play, and I credited them with it, whereupon my Quaker City critic put my comments in his little teapot, and they steamed out piping hot "fulsome praise."

IT WAS, OF COURSE, very considerate and loyal in the Kennel editor of the Philadelphia *Press* to scorn the base insinuation that his fellow-townsmen were defeated by an English team not even second class, and I am sure that tabasco-flavored half-column devoted to my "ridiculous" statements must have kept him up after his usual bedtime. But then this is a cruel, thankless world, and the paths of some of us do seem to travel persistently in the shade. Stick to dogs, dear confrère; you are wasting your talent in a field so restricted as American cricket.

WELL, THE POWERS BEHIND THE THRONES at Harvard and Yale have added that triumph to their record which I predicted two weeks ago. Base-ball alone, out of all the sports discussed at those memorable "dual league" conferences of 1890, is the only one in which to-day there is not a Yale-Harvard league to last four years or more. I doff my cap to your pertinacity, Messrs. —. But I do not name you, nor have I sufficient space to say why I am not entirely "with you."

For four years the game between the crimson and the blue will be played at Springfield, and it behooves the men who have made this agreement to put the grounds at Hampden Park into respectable shape to accommodate the crowd, and yet to keep that crowd off the playing field. Foot-ball is rich enough, and money properly expended will do it; unless a substantial grand stand is erected there will be a serious accident one of these days. Now that the holding of the game at Springfield four years is a certainty, no reason remains for not putting the possibility of calamity beyond question.

THERE IS ONE THING that will surely make trouble for some of the teams before the season is over, and that is the question of how much holding in the rush line will be allowed by umpires. Mind, I do not say how much holding is allowable, for under the rules any holding with the hands or arms is illegal, but the ordinary ruling must always be just this side of undue severity, and the players are evidently taking it for granted that they can do a very considerable amount

of it without penalty. They are counting without their hosts, for when the big games come, they will find that none of the first-class umpires will allow anything like what I have seen on every field this season.

THERE IS LITTLE LIKELIHOOD, unfortunately, of Harvard and Princeton meeting this season. Harvard, with the exception of one inflated committee-man, is desirous of playing Princeton, but is not willing to run the chances of a game before meeting Yale. (If Yale exhibited this spirit, I wonder what would become of foot-ball this season.) She wants to play the week following Thanksgiving. There are two objections to such an arrangement—first, the possibility of a frozen field; and, second, the fact that a game after Thanksgiving would be somewhat of an anticlimax. Harvard ought to be willing to play Princeton on November 14th; it's as fair for one as the other all around. She is not, however, and therefore we shall see no game this year.

PRINCETON EVIDENTLY INTENDS being well supplied with material behind the line. Judging from the number of men who continue to play there, one might fancy Captain Warren had determined on driving his backs into Yale's line, until they either make substantial gains or are used up and replaced by fresh men. If such really is his idea, I very much doubt its efficacy. Yale's line is going to be her strongest point, and the Princeton captain can with profit follow the example of Cumnock last year, and depend for some good gains on punting and sending the ends down field. Notwithstanding all the alleged interviews we read of with "old graduates" and "well wishers," it is my opinion that both games—Harvard-Yale and Yale-Princeton—will have the kicking feature largely prominent. If it isn't, it will surprise some of us. Princeton's latest half back is Flint, who has not been doing very much recently owing to slight injuries. He was tried at left tackle for a while until Holly, another new man, came to the front, and his latest appearance has been at half back, where he certainly does very good work. As a heavy plunging, line-breaking back, he has the stuff in him to make a success, and if he is not taken up into the line, the chances are good we shall see him in some part of the big game. He makes a hard man to tackle when at speed, and bucks the line in the most approved style. Captain Warren will be wise in getting this man into the best of form, for he has weight and strength enough to take a place at tackle in case of an emergency. Just now he has not wind enough to last. I understand Flint has the endorsement of "Snake" Ames, Princeton's greatest full back; if so, there can be little question of the man's promise, for Ames was not only a great player, but a remarkably keen judge of foot-ball material.

HOLLY AT LEFT TACKLE has been showing up very well in the past week. He is more or less of a new man on the 'varsity, but has been played at guard and tackle on the scrub. He is strong and active, breaks through and tackles well behind the opponent's line, but is weak on his own side of the line, where he misses runners, often from overanxiety to secure them, and frequently because of overrunning his man. He is very promising, however, and with good, vigorous, individual coaching can be made to fill this very important position better than any other of the candidates thus far developed. At centre, Taylor, the new man, has been doing fair work. He is earnest, and gets around the field, evidently appreciating he is there for business; but he is not heavy enough to stand the wear and tear of centre play, and in this particular alone he is inferior to Symmes, who, while not so active, has certainly "beef" enough. Moreover, Taylor is an easy mark for a strong centre opposite him, because of the unequal division of legs and body. Symmes, since having been relegated to the second eleven, has played with greater zeal, and there is a possibility of his regaining the place. He is very anxious to play on the 'varsity, and under rigorous coaching and great application might improve on what he has been, but he will never be desirable; he has not the stuff in him to make a first-class centre.

IF TAYLOR SHOULD LEAVE CENTRE, it might not be a bad idea to try him at right guard, where Wheeler just now is playing a stupid game. Wheeler represents a class of candidates that are more damaging to the prospects of a team than any other. Physically he is just the man for the place; he was promising at the very start, and improved until Captain Warren felt that at least one point in the line was cared for. Lately, however, he has played carelessly, and with the idea apparently that there was nothing more for him to learn; consequently he has fallen off greatly, and unless he braces up, is sure to lose his place. One such man on a team is a certain Jonah, no matter how expert the others may be. Harold and Vincent are two of the best new men on the eleven; they are filling their positions as well as can be expected at this time; but, best of all, they are earnest in their work, always on the alert, and realizing their deficiencies, are making every effort to remedy them. Such men are always certain to become valuable players. Both of them need to perfect themselves in sharp hard tackling; and Vincent must have a care that he is not coaxed in, on around the end plays. Harold, when he has gotten through the opponent's line, can greatly improve on his getting the runner. He is apt now to be blocked too easily, or possibly he thinks some other of his side will reach the runner. That won't do. Every man who starts for an opponent running with the ball should go for him as though the defeat or victory of his team depended on that one play and himself.

LOOKING OVER THE TEAM, I find some general improvement. To begin with, it is gratifying to note that the warning in these columns against permitting good raw material to go to waste for want of stiff coaching has had the desired effect. Several coaches have been on hand during the past week, and the result certainly must prove what can yet be accomplished if the good work is kept up. The men are tackling sharper and stronger, though frequently too high. They are working together better, and appear to at last appreciate the advantage of systematic play. Especially have they improved in interference, but they are far from first class in that respect yet, and unless that point is reached, the gains against Yale will be few and small. Princeton's interference, her punting, and her ends must stand her well in hand on Thanksgiving Day; otherwise her showing will not gladden the hearts of her sons. The score piled up against the Manhattan Athletic Club team last week should not be counted upon too strongly by Princeton supporters. The names of such players as Cash, Janeway, George, and Bovaird in the opposing line read well, but it should be remembered that they were not in training, and did not put up a first-class team game, or last the full time. Princeton has likewise shown that her men are not in shape to last the full time and play hard, though it is rather early to criticise on that score. It will be a hard game November 26th.

A WEEK AGO THERE YAWNED a considerable gap between Yale and the two other big teams, but that gap is beginning to close up, and both Harvard and Princeton are, under the lash of vigorous coaching, following hard on the heels of their blue rivals. It is going to be a great finish, and to name winners grows harder as the end draws nearer. Harvard's material has all along been the best, but only lately has it been handled with good judgment. Unexpected material has been developed at Princeton to fill up their line where they were weakest, and the regular discipline has already greatly improved her team-work. Yale, with the best start, fiddled about trying to decide whether to drop one or two of the old men for promising new ones, and this hesitation allowed her two rivals to gain on her.

Not one of the three has any defensive game at all, and a match between any of them at this date would be a scoring match in earnest. It would be like a boxing-match of "hit hard and often, and never mind your guard." The last Harvard-Princeton game was one of this character; both teams were scoring teams, but neither was strong in defensive play, and the way the points ran up was astonishing.

"'By main strength,' quoth I, nodding; 'but your betters draw the same way.'" So Shea, and Symmes, and Stillman, and Sanford—what a sibilant crowd!—and Taylor, and Bangs, all are "main strength" men. We seem to have lost the quality of skill in centre rushers. Have Corbin, George, and Cranston no mantles behind them?

> "That the probation bear no hinge nor loop
> To hang a doubt on."

CORBETT AND MACKIE, having served the turn of awful examples for the stern Harvard Athletic Committee, will erelong be regular men again. They have played along—of course against any possible hope of a chance upon the 'varsity—but with simply that commendable love of toil which always characterizes men who stand no show for the team, and incidentally have kept in very fair condition. Like the New England rule which allows the track athletes to contest in New York, but prevents a base-ball or foot-ball game with Princeton, the probation law is one of rubber and hard to break.

LAST YEAR I CALLED TRAFFORD'S attention to the fact that in a minor game at Springfield, he had scored by the unusual circumstance of actually punting a goal. It seems to me he has not yet entirely conquered this trick. The truth of it is that in his endeavor to kick quickly, he kicks too quickly, and his foot takes the ball, not the very instant it *rises*, as the rule provides, but while it is on its downward course. The worst of it all is that it is no easier, but rather harder to kick in this way than to drop kick. The pleasant task which would devolve upon a referee, should Trafford perform this feat in a big game, is something better imagined than described.

TWO WEEKS FROM SATURDAY Harvard must meet Yale at Springfield. Will she be ready? That is the question. To me, as I watched Trafford's men at work the other afternoon, it hardly seemed possible, and yet there was something about their play which suggested more strength than I was inclined at first glance to give them credit for. The eleven is gradually getting into shape, and it is within the range of possibility that it may yet show something which resembles team play, but as yet, even at this late date, individual play predominates. It is this lack of team play which makes Trafford's eleven so weak when it is on the defence. The men apparently have no idea of trying to help one another. Each man acts for himself, and consequently their work, taken as a whole, is decidedly poor for a 'varsity eleven. The blocking in the line would not do credit to a school team. Several times I saw a rusher completely thrown off his balance, when a slight change in his position would have enabled him to prevent his opponent from breaking through. Somebody ought to show those rushers how to manage their feet. The majority of them place themselves so as to offer the least possible resistance, and it is no wonder that even the men on the second eleven find it easy to break through for gains of five or ten yards. If Harvard's second-class players can do this, what possible chance is there for Harvard to win at Springfield?

BY THEIR PRESENCE TRAFFORD AND CUMNOCK, however, will, I am confident, greatly alter this state of things. With these two men to coach, I see no reason why there should not be a marked improvement in the play of the forwards before they are brought face to face with Yale. The good effect of the presence of Cumnock may indeed already be seen in the way the men go at their work. There is more life in their play, and they seem to realize that work is before them. I cannot say I am entirely pleased with Harvard's system of interference. Theoretically it is almost perfect, but practically it does not seem to be a success. Perhaps when the men have worked together a little longer, and grown more accustomed to it, it may prove to be not only successful, but also the beginning of an entirely new system of foot-ball tactics.

BEHIND THE LINE Harvard will be fully as strong as she was last year, especially if Corbett plays, as he will, in all probability. Cobb, at quarter, is doing fairly well, but his passing is wretched at times. He lacks confidence, and is inclined to lose his head when hard pressed. This is shown by his passing the ball in an aimless sort of a way, when cooler judgment ought to show him that the chance had gone by, and the ball should be held. He is earnest in his work, however, and I have great hopes that he will pull himself together before the day of the big game. (Last week a *lapsus linguæ* put in Gage where Cobb was intended.) As soon as he finds that the men in front of him are protecting him better, he will realize there is sufficient time for him to gauge his man and pass the ball accurately. Newell and Hallowell are once more beginning to guard the right end in the proper manner, and Captain McClung will find it rather difficult to send a man by them. Their play is decidedly careless at times, however, and they need to be reminded occasionally that, good men as they are, they can still improve. Mason and Emmons on the left end have not been working long enough together to form a strong pair. They interfere with each other not a little, and it is a question whether better men cannot be found. Mason is active and constantly on the move, but he is inclined to work without judgment, and run by his man. If he hopes to cover his position in good shape he must steady down, and not waste his strength in useless efforts.

WATERS IS THE MAN for left tackle, if only "the fates that be" will allow him to play. His presence would greatly strengthen the line, and it is a pity his services are not available at this time. We hear a great deal about the weakness of Harvard's centre, but I am inclined to think it is somewhat underestimated. When it is remembered that no three men have been together for any length of time, it is not to be wondered at that openings have been found at this point. Just as soon as the three men are chosen, and have been long enough together to know how to support each other, the improvement in protecting the quarter and breaking through ought to be marked. There are plenty of good men to pick from. Shea and Vail are practically sure of their positions. Their work, while not brilliant, nevertheless gives good promise. Who the other man will be, it is difficult to determine. Highlands is doing fairly well; but there are several others who are making a good fight for the position, and among these is Mackie.

LOOKING OVER THE TEAM as a whole, I consider it one of good possibilities, but as yet without any strong indications of its being a winning combination. Certainly, judging from the work of the Yale and Harvard teams thus far this fall, Yale has decidedly the advantage. This is to be expected from her larger number of old players. How much improvement the Harvard team can show in the little time which remains is a question. Yale will undoubtedly improve during the same time. Can Harvard improve faster?

WILL SOME KIND FRIEND explain to me why every one of the old Harvard foot-ball players who seizes upon a pen and writes to the papers, indulges in a plaintive wail asking why, with such strong ends and such punting ability, Trafford doesn't kick more? Like one of the Catos, these men never speak their little piece without concluding with the words, "And in my opinion, Harvard should kick more." Don't worry, gentlemen; I know that Harvard lost that Yale game in New York a few years ago simply because she didn't know enough to kick, but that lesson was a good one, and Trafford is going to do plenty of punting when the time comes. "With good ends and a good punter," November will find Trafford quite able to play a kicking game.

YALE WILL DISCOVER, when her team comes to play two full three-quarters, that McClung has given his old men altogether too much resting and not nearly enough playing. To-day his team, if played in their regular order, could not stand sharp work a bit over an hour, and the last half-hour is going to be gruelling work. Unless the men are sent in for the proper kind of work at once, they will not be the same team that made such a magnificent attempt when called upon the last fifteen minutes at Springfield a year ago.

BARBOUR WILL NEVER MAKE a fast quarter. He lacks snap, but is very steady, and what work he does is well done. McClung and the Yale coaches expected to make a great man of him this year, but have only succeeded in bringing him up to the same place where he halted last year. He passes the ball, and then, after a slight but perceptible pause, starts into a run for the proper place. That pause is the fatal hitch, and no amount of coaching seems to take it out of him. Nor has McClung a change quarter of experience or even practice. What will he do if Barbour should be laid up? Play quarter himself, perhaps, as he did his first year on the team, when Wurtenburg was disqualified in the Yale-Princeton game. Well, he might do worse; but if he intends going in on a pinch of that kind, it behooves him to prepare himself by handling the ball at least a few times. McCormick can and has played quarter, but it will take this youth all his spare time to learn something about the position of full back, and if he does much of his playing upon the side of the field in citizen's dress, he will not be a very strong card for Billy Bull's coaching. Unless he plays and kicks, too, every day he will never get into the form needed to drive the ball to Trafford or Homans, both of whom are really excellent punters.

UNLESS BETWEEN THE TIME of this writing and the 1st of November that myth known in former seasons as Morison takes on substance, and appears in the flesh on the Yale Field, Sanford will have a chance to be Heffelfinger's mate. I hear that McClung admires a fluent conversationalist, but wishes Morison had not chosen this particular time of the year to improve his speech. Hartwell has seen enough of Hinkey to decide that either he or Crosby will play outside the lines in the big games, and if I know anything of the man, it will go as near toward making Hartwell a player as anything that could happen, for he has plenty of sand in his make-up. Will Crosby take the back seat?

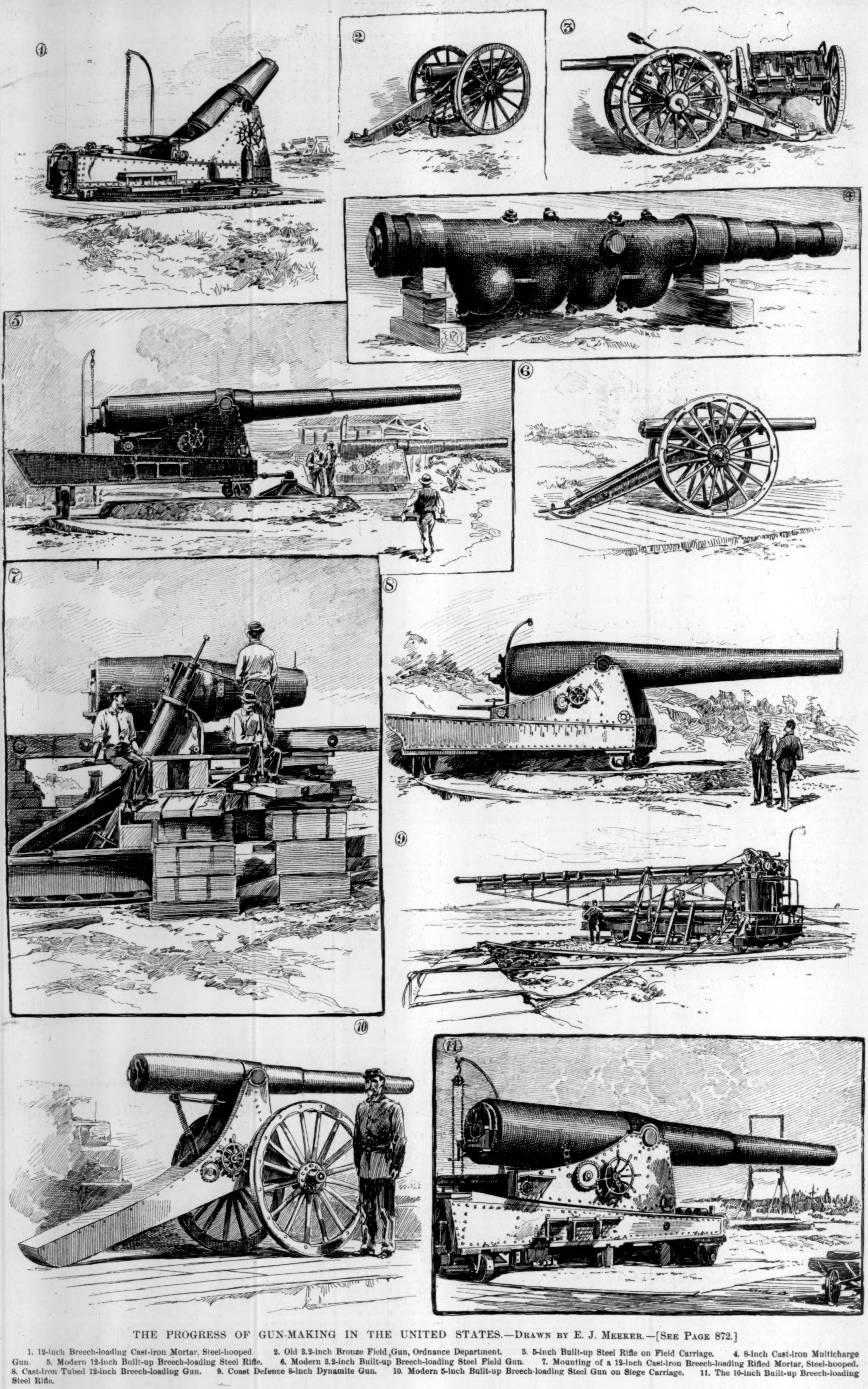
WALLIS FINDS THAT WINTER is sure of a place, and that Messler will make a bid to crowd into the other tackle, so Wallis has taken off his coat, and is putting in the best work he knows how. It isn't a match for his friend Newell, of Harvard, but it will probably keep the Orange man on the Yale team. Stillman is the choice of the centres, although terribly slow and clumsy. Paine plays him almost on an equality, in spite of the former's practice. Corbin is needed if either of them is to look over Taylor's head on Thanksgiving Day. But I hear that Corbin, Beecher, and Billy Rhodes himself will be at New Haven in a week, so we may look for improvement all around.

ATHLETIC CLUB TEAMS in parcelling out the games of the season previous to their settlement by contest, will do well to remember that the Boston Athletic Association eleven includes old John Cranston, Stickney, and F. G. Peters. It is just as well not to count one's chickens before they are hatched.——The curl of that Williams feather acquired by the defeat of Stagg's eleven appears to have been somewhat straightened by the showing of Amherst against the same team of Christian Workers.——The University of Pennsylvania's score against Lafayette, 15-6, is deceiving to those not knowing that both the regular backs, Camp and Branson, did not play. Pennsylvania evidently fancied the game an easy thing, and played with little of the snap which is usually a feature of their work. On the other hand, Lafayette played exceptionally well, their backs were strong, and the team-work very good.——I advise both Lehigh and Wesleyan to keep aloof from newspaper controversy; they will add nothing to their cause, and lose much in public esteem. Leave the washing of soiled linen to "amateur" sluggers and their kind.

READERS OF THIS DEPARTMENT will be glad to learn that Malcolm W. Ford, the all-round athlete, who was sick unto death with typhoid fever, has now passed the critical point, and is on the road to recovery.

OWING TO ELECTION DAY this issue was sent to press Friday night, with Saturday's results, of course, unknown.

CASPAR W. WHITNEY.



THE PROGRESS OF GUN-MAKING IN THE UNITED STATES.—DRAWN BY E. J. MEEKER.—[SEE PAGE 872.]

1. 12-inch Breech-loading Cast-iron Mortar, Steel-hooped. 2. Old 3.2-inch Bronze Field Gun, Ordnance Department. 3. 5-inch Built-up Steel Rifle on Field Carriage. 4. 8-inch Cast-iron Multicharge Gun. 5. Modern 12-inch Built-up Breech-loading Steel Rifle. 6. Modern 3.2-inch Built-up Breech-loading Steel Field Gun. 7. Mounting of a 12-inch Cast-iron Breech-loading Rifled Mortar, Steel-hooped. 8. Cast-iron Tubed 12-inch Breech-loading Gun. 9. Coast Defence 8-inch Dynamite Gun. 10. Modern 5-inch Built-up Breech-loading Steel Gun on Siege Carriage. 11. The 10-inch Built-up Breech-loading Steel Rifle.

PHILOPENA.

PHYLLIS, maid of gay demeanor,
  Fair, with fascination fraught,
Bade me eat a philopena,
  And, consenting, I was caught.

But the debt I quickly paid her
  Ere the sad time came to part,
And her keen perception made her
  See the forfeit was my heart.

WILLIAM BARCLAY DUNHAM.

COOLIES COALING A WARD LINER—HAVANA.

BY FREDERIC REMINGTON.

THE big Ward Line steamer was lying at her anchors in the quiet harbor of Havana awaiting her cargo and coal to the port of New York. Her people were watching the great white men-of-war, the black liners to France and the tight island, and the dozens of lesser craft bound to here and there and everywhere. They saw the strange lighters peculiar to the Spanish American ports bearing their loads of fruit and tobacco to our hold; and they watched the clean-limbed, warm brown creoles as they worked at the bale hooks, and they thought, they are not white, but possibly a better color; they are a more solid color; a color produced by the sun pouring on to human flesh, and a natural result, while we—we are white, pale, will I say an unnatural color; it seems that to all people who are brown or black; but, of course, we are, as the base-ball folks say, "the people," and why quibble.

The folks on the *Orizaba* saw the coal-lighters coming out in tow with the carbonaceous matter calculated on by arithmetical folks to take the *Orizaba* to New York. Naturally, coal-barges are infinitely commonplace. Why watch a coal-barge? No one will, and no one did; but the people on the coal-barge seemed strange; Chinese evidently. Chinese are grotesque; but the people on these coal-barges out-Chinesed the Celestials. They were comic opera at a hundred yards; but at close range one forgot the soldier caps, the foot-ball jackets, the Canadian lumber camp mackinaws, and the rest of the world, and was gratified by a most astonishing array of physiognomy.

"Canton River coolies," explained the chief engineer to me; and he was one of those old sailors who have been everywhere, and who know everything except how to localize themselves. The coal-barge came alongside, and I went down to look over a line of costume and physiognomy which would be a boiling down of ten years' experience in the sketch class at the Art Students' League.

As to physiognomy, volumes, years, nothing, could convey the idea. Some had noses—of course most of them did, but then, again, some did not—likewise ears, and so on through the list of human parts, bar brains, which were wholly lacking. I went down to the port-hole of the lower deck, and contemplated this so-called humanity. Nothing that I had ever seen compared with it. The mutilated body of the red Indian's atrocity, the starved and frozen steer, the white corpse on the marble of the dissecting-table, the damned and forsaken of a great city, nothing to compare—it was a climax. Dante and Doré would have stopped short; but I must go on to say that here was a new genus—a God-forsaken, a man-abhorred creature, a drug-racked, leprosy-eaten thing, devoid of mentality, and of every other thing which distinguishes man from animals, and if in my vocabulary I knew of a better word than animals, I would not use that word, since I mean a thing lower than that. I experienced every thrill, every shudder, every horrible emotion of which I am capable. Even pity was absent. It was usurped by self-preservation. I saw the terrible man—a thing which might taint my people; a thing which I knew that the political machinery of my country could not keep at a distance. I felt a fear, a desire to get away, as from a savage or a bear or something absolutely inimical to decent clean life. Such an array of filth and vermin, of unclean morals, and ghastly eaten sodden human flesh I had never suspected. The sloughed-off sore of a despotism so ancient that the mind dulls in contemplation of its age was to be met by my kind of men—nay, mingled with. They were in Havana, why not in New York? I never saw them; they may not be outside of Havana. We hope? Yes, but we do nothing.

These coolies pass coal, and they serve up a moral sermon, a frightful picture, and a political lesson to any one who will stop and look.

I am told that these things come into the United States by the hundreds every year. I am willing to be told that the great mass of our Chinese immigrants are clean and industrious, and I have had the experience of travelling our whole Canadian border with Mr. Julian Ralph, who was sent to investigate this thing, and yet if the people of America, who are clean, wholesome, and industrious, could see the reeking sore which sloughs off the Chinese Empire; if they could understand the half-dozen things which I cannot tell, because it would not be printed in a decent journal—they would understand.

Americans are a strange people; at once the most generally intelligent, and, because of their great variety of interests, the most neglectful of their own good ends in the world. These Chinese will come, and we will see a quarter column in the papers every other morning, and yet a great national evil is overshadowed by the little nothingness of a local campaign. The Asiatic leprosy, the drug, the immoral sore of China, is broadcast in this land, and we like it too. Go to Havana, and, if you inquire, you may find it more adjacent.

DANTE'S INFERNO

Is prolific in tortures, but Dyspepsia, a malady to which Hostetter's Stomach Bitters is adapted, furnishes a quiverful of them. Nausea, heartburn, biliousness, wind on the stomach, heart palpitation, and many more manifestations characterize this protean malady. Each and all are dispelled by the Bitters, which also eradicates rheumatism, kidney trouble, and malaria.—[*Adv.*]

TO VISIT CALIFORNIA AND MEXICO VIA PENNSYLVANIA RAILROAD.

No new feature ever inaugurated by the Pennsylvania Railroad Company attracted such universal comment and attention as the series of tours run early this year to the far Pacific Coast; and now that another series is announced for 1892, not only covering the Pacific Coast, but an individualized tour to Mexico, the land of the Aztec, is further illustration of the wonderful growth of the personally conducted system of travelling and the progressive move of this world-famed railroad. Each tour will be limited to a certain number of passengers, who will travel in a Pullman vestibule train, furnished with the luxurious appointments of the richest home, with lady's maid, stenographer and typewriter, library, bath and barber, and smoking and library rooms, and an observation car—in truth, an exact reproduction of the famous Pennsylvania Limited. The first tour leaves New York January 13th, and speeds directly to the Pacific Coast via St. Louis, Kansas City, Las Vegas, and Santa Fé. The second tour, the Mexican, leaves February 10th, running direct to the City of Mexico via Cincinnati, Mammoth Cave, Birmingham, Montgomery, and New Orleans, with incidental stops *en route*. The third, February 24th, runs directly to New Orleans via Cincinnati and Mammoth Cave, and thence, after the Mardi Gras festivities, to the Pacific Coast. The fourth and fifth, both through California tours, will leave March 24th and April 20th, respectively.

The inauguration of this service last year was the theme for universal comment, and the warmest credentials of praise bear testimony to the high standard and perfection of every detail promoting the comfort and enjoyment of the tourists.

Such an opportunity has never been presented before to the people of the East of thoroughly seeing the vast domain of the country they so valiantly boast of, as well as such an opportunity of visiting the interesting land of the Aztec, replete with ruins garlanded with mythical lore. The rates for the round trip are exceptionally low, and include not only all necessary travelling expenses *en route* to the Pacific Coast and return, but also side trips to the attractive resorts in California, and several carriage and stage rides of interest. This applies as well to the Mexican tour, where the objective point will be the City of Mexico and side trips made from there, the rate including every necessary expense as well as hotel accommodations and side trips.

Itineraries presenting the full details of the tours are in course of preparation, and will be issued at an early day. In the meantime more detailed information may be secured by addressing Geo. W. Boyd, Asst. General Passenger Agent, Philadelphia, Pa.—[*Adv.*]

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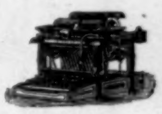

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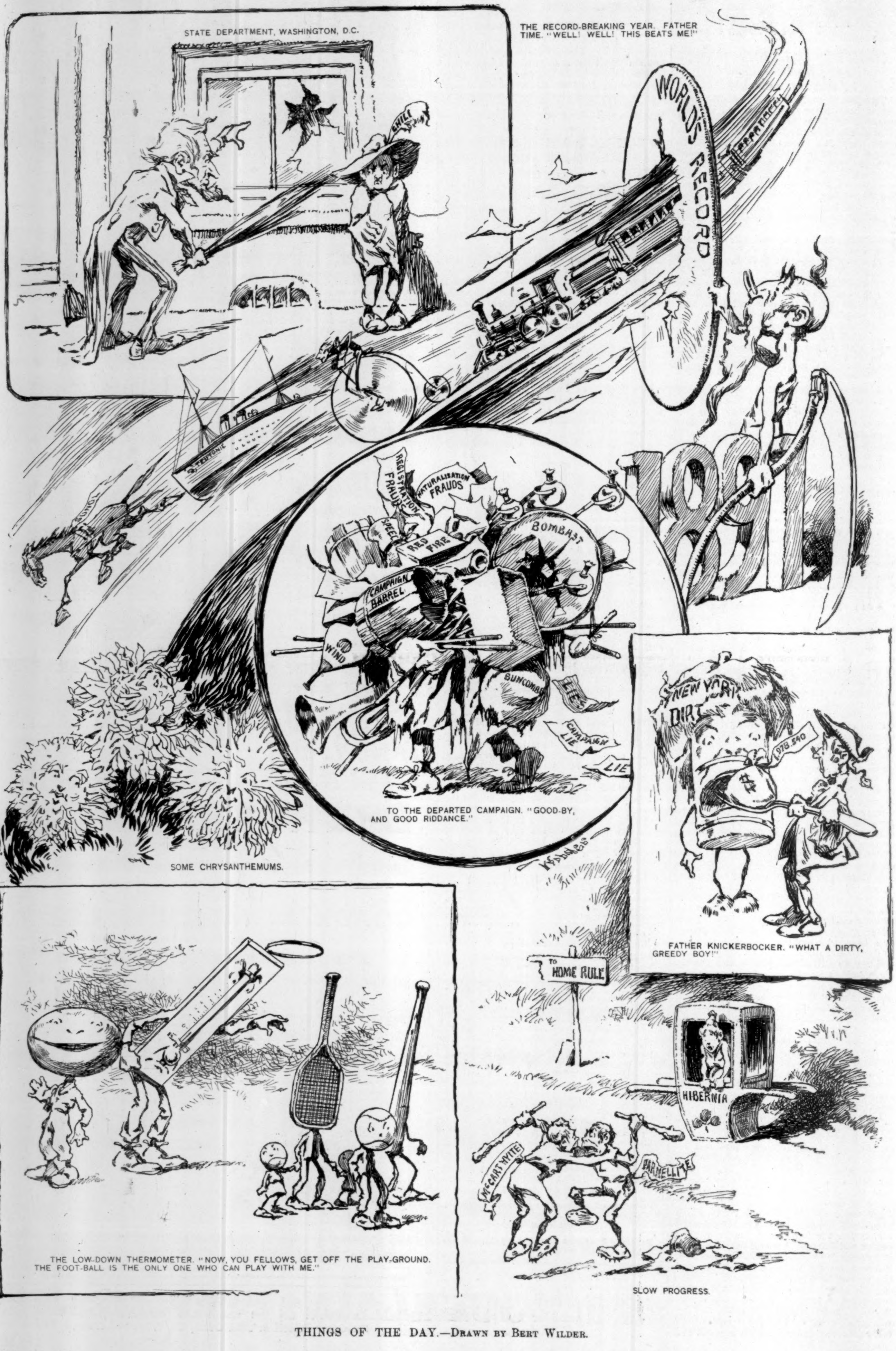

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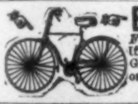

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